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PRINCIPAL CONTENTS.

American Railroad Journal.

Saturday, March 13, 1852.

Pennsylvania.

Railroad Gauges.—We learn from the Pittsburg Gazette that the Legislature of Pennsylvania has passed a law establishing an uniform railroad gauge through the State. The object of the movement is to prevent the six foot gauge of the New York and Erie railroad being extended into the State. The question was submitted as an amendment to the act incorporating the Catawissa and Towanda railroad company, and provides that the gauge of the track of said railroad shall be the same as the gauge of the track of the railroads built and owned by the State; and any and every railroad hereafter constructed through any portion of Pennsylvania, from any point east of a line running due south across the State from the State-line, beginning at the east line of Erie county, shall be of the same gauge as the railroads built and owned by the State, *and no other*—and if any company shall hereafter build or construct a railroad having a southern or eastern connection with any railroad leading to or towards Philadelphia or Harrisburg, of a different gauge from the gauge of the railroads built and owned by the State, then and in such case, all and singular the rights, powers and privileges conferred on such company by its charter, or by any supplement thereto, shall be adjudged null and void—provided, that nothing contained herein shall be construed to apply to the "New York and Erie railroad," to "the Tioga railroad," to the "Lakawanna and Western railroad," already constructed and in operation, nor to to the act fixing the gauges of railroads in the county of Erie passed the 11th March, 1851.

This gauge law has been secured through Philadelphia influence. A letter in the North American says:—

The section, it will be seen, keeps the New York influence outside of the State lines, and harmonizes the railroads of Pennsylvania into one complete system. It avoids transhipment within the State, and keeps our grasping neighbor within her own bonds; and, by binding together the interests of all counties, will foster everywhere a good feeling for Philadelphia. Where a difference in the gauge of railroads renders a transhipment at some point inevitable, it should be fixed near the boundary, for reasons so palpable and convincing as to require no comment. As every transhipment, forced by a change of gauge, is equivalent to fifty miles of road, it is quite apparent that it never should take place in the middle of Pennsylvania, for that would turn the trade of the northern half of the State away from us forever.

Philadelphia, to be strong over the whole western country, must first be strong in her own State. She must first be allied in interest and intercourse with all parts of the commonwealth, and thus acquire strength at home. Her ground plan of operation should cover the whole of the State of which she is the metropolis—her connections with the improvements of other States can then be made and *controlled* in such a manner as will fill her coffers and swell her commerce. Pennsylvania soil should not be used as a highway leading to and from her rival and competitor—it should be ramified by railroads uniting in Philadelphia, as the human body is coursed by arteries centering in the heart.

New York has long indulged the hope and expectation of running across eastern and northern Pennsylvania, to shorten her railroad distances to the Ohio and the lakes. It has been her aim to penetrate Pennsylvania on the north with the six feet gauge of track, and on the east with the New Jersey track of four feet ten inches gauge, and so, while running through the State, secure its local interior trade to the loss and injury of Philadelphia. But this cunning game has been effectually checked in the adoption of the gauge law above alluded to.

All this is great business. It remains for Philadelphia to demonstrate the fact, that the true way to build up a city is to throw obstacles in the way of freedom of trade. If she can thrive by pursuing this policy, she will be the first city that has ever succeeded in this way.

We ask our Philadelphia friends to contrast their exclusive policy with that of New York. A few years ago, Massachusetts took it into her head that if she could only get a road to the Hudson river at Albany, she could supplant New York in securing the trade of the west. Our people bade them God speed, and gave them all they wanted to carry out their schemes, and even authorized the city of Albany to subscribe largely to the Western railroad. Well, the Bostonians got their road, which has indeed proved a vast benefit to them, and they take over it some 200,000 tons annually, which otherwise would have passed through our own city, adding so much to the aggregate of our commerce, a matter by no means to be despised. This traffic, in the Pennsylvania acceptation of the term, New York has thrown away. But our imprudence did not end here. Our eastern neighbors, still possessed with the idea that they could make Boston the exporting city of western produce, and finding that the Western railroad did not give them that position, went in search of a "*north west passage*," around the head of Lake Champlain. This would do the business, certain. They first appealed for authority to build the Ogdensburg railroad. This granted, they next said, "we must bridge Lake Champlain." Very well, they have obtained and have used this privilege, though the right of the Legislature to grant it was gravely questioned by disinterested persons, who feared from such an act, the violation of the vested rights of a large body of our citizens. In fact, we may say that everything that our great eastern rival has asked, to carry out her plans, has been ungrudgingly yielded; and if there is a communrty in the world whose rivalry is to be feared and guarded against, it is these same Massachusetts people. But our liberality did not end here. After giving in detail all that has been asked of us, we have volunterily thrown off all restrictions upon the construction of railroads, and allow any body of men, with whatever object, to unite for the construction of a railroad, with the power to locate their line and determine its directions, without even making an application to the Legislature. Railroad construction

in New York is just as open to laudable or illaudable competition, as ship building; and what is more, the present law is universally approved.

Nor do we see any symptoms that New York is likely to fall a victim to the liberal policy. She is still the grand depot of the surplus product of every branch of our national industry, and the great entrepot of our foreign trade. She is the rendevous of our ocean steamers, and the centre of the monetary transactions of this continent. She is vastly superior in population to any of our other leading cities, and seems likely to maintain her pre-eminence in all the particulars named. All has been accomplished at the same time that she has extended the most generous policy towards all her rivals, pursuing the same objects with herself.

We think it can be demonstrated, that what was considered at the time as only a liberal policy towards our neighbors, was in fact the dictate of a wise self interest. The present prosperity of Massachusetts is in no small degree owing to the Western railroad. It supplied that State with food, and opened an outlet for her manufacturing establishments, by which their growth was stimulated beyond any former precedent. What is the result we now witness? It is, that New York is reaping the benefit of this growth of another State, which she so wisely fostered. The products of all these manufacturing establishments, the business developed by her innumerable lines of railroads is now centering in this city. New York has become the great point of distribution of her products, and is fast becoming the port of importation for her supplies of foreign merchandise. If then we parted with the handling of a few hundred thousand tons of merchandise, we have only sacrificed this, for a much larger amount now received in return, upon which we not only receive the cost of warehousing and transhipment, but a commission besides. Never was there a more perfect illustration that honesty is the best policy.

There are now over 5,000 miles of road in operation in New York and New England, and some 2,000 in progress. All these roads Philadelphia would cut off from all western connections, except those which should be made through her. Admit this principle to be correct, and our internal commerce is at once at an end. Every little town can exact equally onerous conditions, and impose upon railroad companies the burden of supporting them, when but for such a support, they would never have been heard of. We think that the greatest good of the greatest number should become the fundamental law of the land, and if a city or town cannot sustain itself without taxing commerce and travel, the sooner it goes down the better.

But what Philadelphia relishes so well by no means suits the stomach of other portions of the State. The city of Pittsburgh is now alive to the subject of a railroad from herself, to connect with the Erie railroad at Olean, to meet also at the same point, the Genesee Valley Railroad. From this road she expects to derive a large and lucrative trade, and over it to forward the produce of her mines, lumber, etc., etc. It is regarded as an exceedingly important project. But the guage of the Erie Railroad is 6 feet. To render the Alleghany Valley Railroad useful and profitable, it must have the same guage, as a transhipment at Olean is not to be thought of. Here there are the two great cities of Pennsylvania at loggerheads upon the question of guage. How the matter is to be compromised we do not know, but the present condition of things shows the endless difficulties and embarrassments which any but the *true* course is sure to involve States as well as individuals.

New Railroad Projects before Congress.

Below we give a list of the new railroad projects now before Congress for aid, by grants of land similar to that extended to the State of Illinois, by the last Congress. They make up an aggregate line of nearly 9000 miles. We have given the length of most of the lines, but we presume that our estimates are only approximately correct. We presume that a large number will be added to the above list before the adjournment of Congress:—

1. Railroad from St. Louis, Missouri, via Little Rock to Red river near Fulton. This road runs southerly half way across Missouri, and in a diagonal direction entirely across Arkansas from northeast to southwest, in all about 500 miles.

2. Road from Dubuque, in Iowa, near the north line of the State, to Keokuk in Iowa, in the extreme south part of the State. Its length is over 300 miles.

3. Road from Davenport on the east line of the State of Iowa, westward to the west border at Council Bluffs—a distance of 350 miles.

4. Road from Burlington in the southeast part of Iowa, northwesterly to Fort Desmoines, on the Desmoines river—about 150 miles.

5. Road from east to west across the north part of the State of Missouri, from Hannibal on the Mississippi, to St. Joseph on the Missouri river—225 miles.

6. Road across the centre of Missouri, from St. Louis to some point near Independence, on the west line of the State—300 miles.

7. Road from the east to the west line of Michigan, beginning at Lake St. Clair and terminating on Lake Michigan, points not yet determined, but road to be located where there are the best lands and the most of them of course—distance, 225 to 250 miles.

8. Road from Saginaw on the east side of Michigan, northerly along Lake Huron to the Sault Ste. Marie at the mouth of Lake Superior, thence along the south shore of that lake to near its western extremity at Montreal river—800 miles.

9. Road from Helena on the Mississippi river, midway of the State of Arkansas, to fort Smith, on the west line of that State, crossing the State from east to west—275 miles.

10. Road from the Mississippi river, opposite Memphis, Tenn., in a southwesterly direction across the State of Arkansas to the Texas line—about 350 miles.

11. Road from Selma, in the southerly half of Alabama, north through that State to the Tennessee river—about 175 miles.

12. Road from Gerard on the line between the States of Alabama and Georgia, southwesterly across to the south-west corner at Mobile—250 miles.

13. Road from Milwaukee on Lake Michigan, on the east side of Wisconsin, westward across the State to the Mississippi river, on "the most eligible route"—200 miles.

14. Road from the north line of Illinois, northwardly through Wisconsin to Lake Superior, varying according to route from 350 to 400 miles.

15. Road from Manitouoc on Lake Michigan in Wisconsin, westwardly across the State to the Mississippi river—250 miles.

16. Road from Milwaukee on the east line of Wisconsin, northwestwardly to Prarie La Crosse, on the west line of the State on the Mississippi river—250 miles.

17. Road from Fon du Lac, on Winnebago lake, in Wisconsin, southerly Janesville—100 miles.

18. Road from Green Bay in Wisconsin northwestwardly to Lake Superior—250 miles.

19. Road from Shawneetown, Illinois, on the Ohio river, westerly to the Mississippi river—150 miles.

20. Road from Warsaw, Illinois, on the Mississippi river, northeasterly to Peoria—150 miles.

21. Road from Warsaw to Rockford, near the line of Illinois—225 miles.

22. Roak from Oakland, near Detroit, northwesterly across the State of Michigan, to the mouth of Grand river—about 200 miles.

23. Road from Lafayette, Indiana, westerly across the States of Illinois and Iowa, or Missouri, to the Missouri river—about 600 miles.

24. Road from Springfield, Illinois, southwesterly to Alton—150 miles.

25. Road from Pensacola, Florida, northerly to Montgomery, in Alabama—150 miles.

26. Road from Brandon, Mississippi, easterly to the line of the State—100 miles.

27. Road from the Falls of the St. Louis river, at the western end of Lake Superior, in the Territory of the Mississippi river—200 miles.

28. Road from New Albany, Indiana, opposite Louisville, Kentucky, westerly through Indiana and Illinois to Alton, opposite St. Louis—325 miles.

29. Road from New Orleans to Jackson, Mississippi—200 miles.

30. Road from Toledo, on Lake Erie, in the State of Ohio, southwesterly to Springfield, in Illinois—400 miles.

31. Road from St. Charles, Missouri, near St. Louis, northwesterly to the river Des Moines, in Iowa—about 200 miles.

The Decision in the Wheeling Bridge Case.

The decision of the U. S. Supreme Court, in the case of the Wheeling bridge, we find published in the Pittsburg Journal. It was delivered by Judge McLean, as the opinion of the Court, Judge Taney and Judge Daniel dissenting.

After a statement of the history of the case and the manner in which it came before them, and declaring the grounds on which the Court had jurisdiction, the opinion proceeds:

The fact that the bridge constitutes a nuisance is ascertained by measurement. The height of the bridge, of the water, and of the chimneys of steamboats, are the principal facts to be ascertained. If the obstruction exists, it is a nuisance. To ascertain this a jury is not necessary. It is shown in the report, by a mathematical demonstration. And the other matters, connected with the case, as to the benefit of high chimneys, lowering them in passing under the bridge, and shortening chimneys, are matters of science and experience, better ascertained by a report than by a verdict. And the same may be said of the statistics which are in the case.

The opinion then goes on to state that the bridge does constitute an obstruction, as shown by the report of the commissioner, who was appointed by the Court to make the examination, and says that "the report having been the result of a most arduous and scientific investigation of the facts, is entitled to the full weight of a verdict."

After enumerating the delays which have been encountered by steamboats in passing the bridge, set forth in the report of the commissioner, and which delays, it was argued by the counsel for the bridge company, would be avoided by the boats using shorter chimney pipes, or by having them constructed on hinges, to lower them, the Court decide that this would involve a heavy expense and reduce the speed of the boats, and would both be wrong.

There are but seven boats of the two hundred and thirty running on the Ohio, according to the report of the commissioners, which carried chimneys so high that they could not pass under the bridge without lowering them; but these boats carry, it was in evidence, about one half of the goods in value and three-fourths of the passengers, between the cities of Pittsburg and Cincinnati. The obstruction to the seven boats the Court, therefore, decide to be sufficient to constitute the bridge a nuisance, which the law might be invoked to abate.

The Court notice the arguments of defendants' counsel that, in a few years at most, there will be a concentration of railroads at Wheeling, and at other places on the Ohio, connecting the eastern with the western country, which from their speed and safety must take from the river the passengers and a considerable portion of the freight now transported in steamboats; but they say, it does not follow from this that when these things come to pass, that the Ohio river will be deserted, or that the free navigation of it should not now be secured by prohibiting bridges or viaducts to be thrown across it, that will interfere with its free commerce.

The opinion thus concludes:

It is said that the interest of commerce requires

navigable waters to be crossed, and that in such a case the inquiry should be, whether the benefit conferred upon commerce by the cross route, is not greater than the injury done. In the case of the King vs. Sir John Morris, 1 Barn. & Adol. 441, it was held that the injury cannot be balanced against the benefits secured. And in the case of the King vs. George Henry Ward, 3, ib. 26. 384, it was held where the jury found an embankment complained of as a nuisance, but that the inconvenience was counterbalanced by the public benefit arising from the alteration, it amounted to a verdict of guilty.

If the obstruction be slight, as a draw in a bridge which would be safe and convenient for the passage of vessels it would not be regarded as a nuisance where proper attention is given to raise the draw on the approach of vessels. Of this character is the complaint of the plaintiff against the bridge, that it obstructs sea vessels built at Pittsburg Sails cannot be used to advantage on the Ohio or the Mississippi, consequently there can be no necessity to hoist the sails. Such vessels float down the river or are towed by steam vessels.

It is true the injury done to the State of Pennsylvania may seem to be small when compared to the magnitude of this subject. It applies to all our rivers, and effects annually a transportation of many millions of passengers and a commerce worth not less than six hundred million of dollars. It would be as unwise as it is unlawful, to fetter in any respect this vast commerce.

In all the charters granted for the construction of bridges, over navigable waters, it is believed all the States, not excepting Virginia, have provided that their navigation should not be obstructed.

The bridge company had legal notice of the institution of the suit, and of the application for an injunction to stay their proceedings, before their cables were thrown across the river. This should have induced them to suspend for a time their great work, alike creditable to the enterprise of their citizens, and the genius and science of the Engineer who planned the bridge and superintended its construction. It is a matter of regret, that by the prosecution and completion of the bridge, they have incurred a high responsibility.

For the reasons and facts stated we think that the bridge obstructs the navigation of the Ohio, and that the State of Pennsylvania has been, and will be, injured in her public works in such a manner, as not only to authorize the bringing of this suit, but to entitle her to the relief prayed.

Believing from the estimates in the case, that the obstruction to the navigation of the river may be removed by elevating the bridge, at an expense, which when added to the original cost will leave a reasonable profit to the stockholders, on the entire capital expended, we have endeavored to ascertain the lowest point of elevation which will secure this object. And on a full view of the evidence, we are brought to the conclusion, that an elevation of the lowest parts of the bridge, for three hundred feet, over the channel of the river, not less than one hundred and eleven feet from the low water mark, will be sufficient—the flooring of the bridge descending from the termini of the elevation, at the rate of four feet in the hundred—this will give a level headway for boats of three hundred feet in width, and will enable those whose chimneys are eighty feet high to pass under the bridge, when the water is thirty feet deep, from the ground, leaving the tops of the chimneys two feet below the lowest parts of the bridge. If this or some other plan should not be adopted which shall relieve the navigation from obstruction on or before the first day of February next, the bridge must be abated.

We do not deem it necessary to provide against the floods, which seldom occur, and which when at the highest, overwhelm the lower parts of our cities and towns on the banks of the Ohio, and necessarily suspend for a short time, business on the river.

After the opinion had been delivered, Mr. Johnson, of counsel for defendants, suggested to the court, that the engineer of the bridge had informed him that the obstruction to the navigation of the Ohio, might be avoided by making a draw in the suspension bridge, or in some other manner, far less expensive to the bridge company, and equally convenient to the public, than by elevating the bridge as required in the opinion.

The suggestions were, by request of the Court, then reduced to writing, and, on Monday last, Judge McLean, delivered the opinion of the Court, embracing the following parts:—

1. All artificial obstructions to navigation must be removed without any regard to cost to the parties creating them.

2. At the same time, whilst protecting the right of freedom of navigation, this Court will not impose unnecessary expense on the defendants in the case.

3. Draws may be suitable to tide water navigation; but this Court are of opinion, that they will not obviate the obstruction of the Wheeling bridge, on account of the swift currents and high floods of the Ohio river.

4. The questions which are of practical skill and science are therefore referred to Engineer McAlpine, of New York, to report upon at the extra term in May.

5. The decree requiring the elevation or removal of the bridge shall now be filed, but shall not be recorded until after the Engineer's report. Decree filed.

So that the question of whether a draw may be made in the bridge, and its elevation or removal then dispensed with, will come up for decision by the Court at their meeting in May next.

The decision of the Court on this and every other point which the case involved, is conclusive, but there is a way by which the evils, which it is feared it would entail on the trade of the West and the intercourse between it and the Atlantic border, may be avoided. The judgment of those, whose interests are most concerned, would seem to be in opposition to that of the Court, as to the great advantage which structures over the Ohio river, like that at Wheeling, give to those who are concerned in the trade of that valley. This is shown in the action of the members of the Legislature of Ohio. That body consists of one hundred and thirty-one members, and though several of them were absent at the time, one hundred and twenty-one have signed a petition to Congress, in which they declare the bridge to be "an all-important work for the safe and uniform transportation of the United States Mail, and for the accommodation of the travelling community of the whole valley of the Mississippi, and they therefore pray Congress to interpose to sustain the bridge by passing a law to legalize the same, as the Great Western Mail route."

This Congress has the right under the Constitution to do, and their vote declaring the bridge a regular mail route, will rescue it from the decision of the Supreme Court, and let it stand. The question is an important one now, but must increase in importance as the country fills up, and railroads are extended. This opinion of the Supreme Court, if there be no means of avoiding it, must ever operate as an insurmountable objection to bridging the western rivers, if any interest can be brought to bear against it. Congress should, therefore, now that the evil is curable, interpose its authority, and by declaring the bridge to be a public mail route, save it from removal, and thus secure to the trading community of the whole valley of the Mississipi the "accommodation," for which the members of the Ohio Legislature so justly ask.

Northern Route.

A Fact for Tobacco Shippers.—Saturday last, a German house shipped through the houses of Messrs. E. Webb and Huston, of this city, by the Northern railroad route to New York, 68 hogsheads of tobacco, there to be re-shipped to Antwerp, for which market it was purchased. Before the contract was closed with Messrs. Webb and Huston, the holders of the tobacco telegraphed to the agents at New Orleans to learn the rate of freight between New Orleans and Antwerp, and after receiving an answer, and comparing the rate with that at which the tobacco could be shipped from New York to Antwerp, found it could be a saving in expense of transportation, as well as an economy of time to give the Northern route the preference. The charges between this city and New York are now high, owing to the lateness of the season, which compelled the shippers here to rely upon railroads all the way except across the Lake, instead of being able to avail themselves of the cheaper navigation by canals, through the States of Ohio and New York.—*N. O. Bulletin of 21st.*

Pennsylvania.

Canal Commissioners' Report.

From the report of the board of Canal Commissioners of this State we make the following extracts:—

The commonwealth of Pennsylvania has completed and in operation 652¼ miles of canal and railroad, independent of feeders not navigable, as follows:

	Miles.
Delaware division, from Bristol to Easton	59¼
Columbia railroad, from Philadelphia to the basin at Columbia	82
Eastern division, from Columbia to the junction of the Juniata and Susquehanna divisions at the head of Duncan Island	45¼
Juniata division, from the junction at Duncan's Island to the basin at Hollidaysburg	127¼
Portage railroad, from Hollidaysburg to Johnstown	36
Western division, from Johnstown to the Monongahela river at Pittsburg	104¼
Susquehanna division, from the junction at Duncan's Island to Northumberland	40¼
West Branch division, from Northumberland to Farrandsville	76
North Branch division, from Northumberland to the Lackawanna	72¼
Bald Eagle side cut from the pool of Dunstown dam, on the West Branch division, to Bald Eagle Creek	3¼
Lewisburg side cut, from Lewisburg to the West Branch division	¼
Lackawanna feeder, at the termination of the North Branch Division	¾
Alleghany Branch of the Western division in Alleghany city	¾
Feeder at Johnstown on the Western division	1¼
Feeder at the mouth of the Rayston branch of the Juniata	1
Total miles	652¼

Upon the completion of the North Branch canal, from the mouth of the Lackawanna to the New York State-line, 94¼ miles more of navigation will be added to the above.

The Erie extension, consisting of the Beaver division, the Shenango and Conneaut lines, and the French creek feeder, 163 miles in length, and the Wisconisco canal, 12¼ miles in length, which were nearly completed, have been transferred to private companies.

The receipts from tolls have been nearly doubled within the last ten years, as the following table shows:—

1842	$940,213 69
1843	1,017,841 12
1844	1,167,603 42
1845	1,196,979 43
1846	1,295,494 76
1847	1,581,575 87
1848	1,533,344 00
1849	1,633,277 72
1850	1,768,209 46
1851	1,793,624 01

The gross receipts on the several lines of canal and railroad for the fiscal year ending November 30, 1851, amounted to $1,793,624 82, being an increase over 1850 of $25,417 36. The expenditures for the same period amounted to $1,054,893 99.

Included in these expenditures are the following:—

For repairs of breaches	$71,249 72
Purchase of new locomotives	58,717 00
Maintaining ferry at Duncan's Island	10,000 00
Re-building weigh-lock at Easton	13,000 00
	$152,966 72

The re-building of the Conestoga bridge, $17,854 50; the re-building of the Clark's ferry bridge, $21,922 30; the re-building of the Shamokin Shute, $4,678 50; the extraordinary repairs to the planes on the Alleghany Portage railroad per act of 1850, $15,420 06; the building of an addition to the wharf at Bristol, $1,500; the repair of road and farm bridges, $25,000; and new depot at Parkersburg, $10,000—not being fairly chargeable to the

repair account of the year, are not included in the statement of expenditures.

Receipts for all purposes on the Columbia railroad	$698,982 53
Portage railroad	249,088 88
Main line of canal, from Columbia to Pittsburg	375,204 75
Delaware division of canal	253,873 43
North and west branch and Susquehanna divisions	239,941 05
	$1,817,090 61
Deduct drawbacks paid at Philadelphia	23,465 82
Total gross receipts on all the lines.	$1,793,624 82

The amount of anthracite and bituminous coal shipped from the several offices on the line of the State improvements for the year 1851, is as follows:—

Easton	707,702 tons
Beach Haven	334 007 "
Harrisburg	60,158 "
Liverpool	14,793 "
Portsmouth	450 "
Newport	2,879 "
Northumberland	11,696 "
Pittsburg	8,361 "
Freeport	51 "
Holidaysburg	46,745 "
	1,187,842 tons.

The main line—Philadelphia and Columbia—is 82 miles in length, extending from the city of Philadelphia to the borough of Columbia. This division of the improvements has been in successful operation duriug the year.

The freight passed over the road in 1851 amounted to 260,860 tons, being an increase over 1850 of 6,805 tons, exclusive of the tonnage from the Reading railroad in that year.

The number of cars passed over the road was 146,226, of which 17,066 were passenger cars. Increase over 1850, 9,271 cars.

Number of trips made by locomotive engines, 8,280.

Number of miles run by locomotive engines, 678,960.

Number of section boats passed over the road, 238.

Number of miles travelled by passengers, 9,838,287—equal to 119,979 through passengers. Amount of toll received on passengers and passenger cars, $216,719 61.

The motive power department is now in good condition, and fully equal to the business of the next year. Five first class locomotive engines were purchased during the past year. There are forty-six engines of all classes upon the road.—Seven of these are undergoing repairs, and will be ready for service in the spring. There are twelve sets of trucks for section boats in order. As the transportation of boats over the road appears to be on the decrease, this number will be sufficient for present use.

The Allegheny Portage railroad is thirty-six miles in length, and extends from Holidaysburg to Johnstown. Transportation was resumed on this road on the 25th of February.

There are twenty locomotive engines on this road; seven of these are of the first class; ten are adapted to short levels with light grades, and three are nearly worn out and of but little service. Two of the first class engines were purchased during the year. New ropes were placed on planes 2, 5, 6, 7, 8 and 10, at a cost of $18,624 94.

Pennsylvania Railroad.

At a meeting of the board of directors held on the 3d inst., the following gentlemen were elected directors—William R. Thompson, to supply the vacancy occasioned by the resignation of Edward M. Davis.

Edward T. Mott, as a representative of the district of the Northern Liberties, to fill a vacancy caused by the resignation of David L. Brown.

Samuel Jeanes, to supply the vacancy caused by the resignation of Thomas T. Lee.

From the Baltimore American.

The Extension of the Susquehanna Railroad to Williamsport.

Attention has recently been called, through the public prints, to a meeting to be held in this city on the 13th inst., for the purpose of advancing the above named improvement. A map has also been placed before the public, under the auspices of the Susquehanna Railroad Company, exhibiting in a clear and satisfactory manner the extensive Railroad connections that must be secured to Baltimore by the completion of this work. A glance at this map shows that the line extending from Harrisburg to Williamsport occupies a commanding position. It is the only line by which travel from the Northern and Western parts of Pennsylvania, New York and Upper Canada will pass to the South Atlantic States. The line from Harrisburg via Williamsport, Elmira and Geneva to Lake Ontario, cuts four grand arteries of trade. Three of these are now in operation, and the fourth (the Sunbury and Erie Railroad) will be under contract very shortly. The Harrisburg and Williamsport extension has the additional advantage of being the only line by which the City of Philadelphia will seek the trade of the Susquehana valley lying between Harrisburg and Williamsport. And it will also be the route by which travel from the North Eastern parts of Pennsylvania and New York will pass to the Western parts of Maryland and Virginia and the valley of the Ohio.

The influences of this extension upon tho stock of the Susquehanna and York and Cumberland Railroad can scarcely be too highly appreciated. Some estimate may be formed, though but proximate, when a cursory view is taken of the Baltimore and Ohio Railroad previous and subsequent to its extension to Cumberland from Harper's Ferry. The total annual revenue of that work stood at about $400,000 for several years previous to its extension. After reaching Cumberland the revenue was soon doubled, and is, for 1851, about $1,350,000. The local population laying within about 25 miles of the extension was in 1840 about 107,000, while that which exists within the same distance of the Susquehanna extension is at this time about 210,000, or nearly double. It is not supposed that the local business would produce an increase proportionate to that obtained on the Baltimore and Ohio Railroad by the through and way business combined. But it is believed that the constant connection of the Susquehanna Railroad with the interior of Pennsylvania, New York and Ohio during the twelve months by railroad, instead of a casual connection of eight months, will go far to establish a proportionate increase for the whole line when completed to Williamsport. The gross revenue of the Baltimore and Susquehanna Railroad for 1851 was $355,000; and the annual increase during the last five years has been at the rate of about 30 per cent. So that allowing the extension to be completed by 1853, the gross revenue would then be about $568,000. Should this company furnish cars for the transportation of tonnage the revenue would at last amount to $700,000. With a road extended in length from 67 to 173 miles, draining, by the extension, the coal mines of Dauphin County and the mineral and agricultural districts of the middle and upper Susquehanna, the way business of a local population, increased by the extension, from 180,000 to 360,000; a constant connection with railroads running north and west to an extent of some 1200 miles—it appears but reasonable to estimate the increase of the revenue at 60 per cent. for the whole line during the first year of its operation, or in round numbers $1,100,000.

If the skeptical look upon this as an unreasonable estimate, they have only to examine the history of Railroads in the United States and Europe during the last ten years, to be convinced that it is rather below than above the mark.

This improvement deserves the critical attention of capitalists and our city authorities; not less for the favorable results that must flow to our trade, than for an opportunity to invest in an enterprise that promises a most favorable return. The fact that our internal improvements have not made large dividends thus far is no criterion by which to judge of their future character. It should be remembered that they have all been hampered by the want of funds in their initiatory movements, and that the original objects with which they have been commenced have not, up to this period, been attained for want of that nerve among our capitalists which has carried our Eastern neighbors forward to the most signal triumphs. All that we now require is the courage to attempt an enterprise, which patient investigation must convince us is easy of accomplishment. BALTIMORE.

Western and Atlantic Railroad.

The efficient General Superintendent, Mr. Wadley, is getting the work on the State Road fairly under way. He has appointed A. G. Ware, Esq. Agent at Atlanta—a first rate choice. Gen. Bishop is continued the Agent at this place with additional power granted him. We learn from the General that he now sends off daily, two freight trains, carrying three or four hundred bales of cotton, and several car loads of grain. Notwithstanding the daily arrival of cotton and other freight, the road is gaining on it. But if necessary, they are determined to put on still another train. Gen. Bishop is carefully storing the grain in box cars, and putting them next to the engine, so that there may be no danger of the cotton taking fire. In a few days, as soon as the people are *breaded* below, they will commence sending off the bacon and lard which is accumulating at this point.

We are informed that the rise of 20,000 bags of cotton have arrived up to this time, about half of which is now sent off—leaving upwards of 10,000 bags for shipment. If nothing happens, and cotton continues to go off as at present, it is thought that about 10,000 bags more will be brought up this season.

We are truly proud to be authorized to speak thus favorably of what is actually doing on the road. We were tired of making promises, which were not fulfilled, and know that our readers cared but little for future prospects based on hope and calculation. We are fully justified in saying—"Now, by St. Paul the work goes bravely on!"—*Chattanooga Gazette, 7th inst.*

Tunneling Machine.

The Boston Commonwealth gives the following description of the machine, which has been constructed to tunnel the Hoosic mountain:—

It is the application to the task of boring a 24 foot hole through a mountain, of a plan of stone cutting by machinery, which is now in use at the Quincy granite quarries.

The cutting tool to be employed is not a chisel, but a small wheel, the periphery of which is brought to an edge. A series of these wheels being carried back and forth over the face of a block of granite, are found to work it down rapidly. Now suppose a hoop 24 feet in diameter to be armed on one edge with these cutting wheels or rollers, and to be turned on its axis with the armed edge pressed against the face of the rock, and we shall see that it will cut a groove or channel of its own dimensions. Such a channel or heading the machine is to carry in three feet, and also drill a hole in the centre. It will then, being mounted on trams, be moved back and a charge of powder, or gun cotton, will be exploded in the central hole which will tear out the rock.

The mechanism by which the cutting of the channel and the drilling of the central hole are to be affected, at the same time, seems well adapted to the purpose. The immense hoop is mounted on a strong wheel, like a tire projecting forward in front 3 feet beyond the felloes. There are on its periphery 10 of the small cutting wheels, placed at different angles, so as to cut the groove larger than the hoop itself, and let it work freely. These cutters are disposed in four groups of 2 or 3 each, and behind each group is a scraper which collects the chips, and carrying them off on an inclined plane, loads them at intervals into a cart which stand underneath on one side.

This great wheel or auger-bit is mounted on a large *hollow* shaft or arbor from the centre of which a drill works to make the central hole. Motion is given to the great wheel not through its arbor, but by a shaft parallel with that arbor and above it, bearing a pinion which tooths into the inside of the great hoop.

And a fixed ring, toothed on its inside, gives motion to the drill in the centre of the main shaft,

The same shaft which drives the great wheel, also drives a feeding screw, which carries the main shaft and wheel forward on ways, one eighth of an inch for each revolution of the cutting hoop. The whole of this gigantic machinery is borne upon a mammoth railway carriage of four wheels, which, when the machine is boring, is to be braced firmly against the walls of the tunnel.

The driving power may be either a stationary steam engine at the mouth of the tunnel connected by bands, or it may be a locomotive, mounted on the trains.

When finished it will weigh 80 tons, every ounce of it of iron, steel and brass. To move it to the scene of its operations it will be taken to pieces. The heaviest piece will weigh 8 tons.

Debt of the State of Louisiana.

Mr. Bourdelon, State Auditor, in his report on the receipts and disbursements of the revenue during the years 1850 and 1851, gives the details of the State debt as follows:

Liabilities for the property banks	$9,225,888
" for 2d Municipaltty, N. O	356,160
" for 3d " "	30,240
" classed as State debt proper	1,225,000
Trust funds	756,441
Total	$11,593,629

Of the trust funds the largest item is one of $479,919 14, due the Government of the United States, it being received by Louisiana under the Deposit Act. The Seminary funds in the hands of the State amount to $120,038 14. Of the trust funds $756,411 are due on demand, and the rest of these fall due at different dates between 1855 and 1872.

Mobile and Ohio Railroad.

From a recent report of this Company we learn that whole amount of public lands which have been set apart for the use of the road, under the recent act of Congress, is as follows:

	Acres.
In Alabama: Even sections within six miles of the road	168,120
Selected within eight miles	85,480
" (by Miss. Com.) fifteen	78,912 75-100
Total in Alabama	332,512 75-100
In Mississippi: Even sections within six miles of road	271,643 60-100
Selected within fifteen miles	504,824 84-100
Total in Mississippi	776,465 84-100

making a grand total of one million, one hundred and eight thousand, nine hundred and seventy-eight and 19-100 acres. The title to these lands, (says the report) however, being vested by the act of Congress in the States themselves, further legislation became necessary to enable the company to employ this munificent grant for the purposes of its donation. Bills were therefore introduced into the Legislature of Alabama and Mississippi, early in their present sessions, to transfer the lands to the company for the benefit of the stockholders, upon the execution of a satisfactory bond to apply the proceeds of the lands to the construction of the road. These bills have been passed by both Legislatures, the bonds have been executed and approved, and the lands are now vested in this company in full and perfect title, subject only to the condition that the road shall be completed from Mobile to the Ohio river within ten years, from the 20th September, 1850.

A portion of the lands thus conveyed to the Mobile and Ohio Railroad embraces extensive forests of valuable timber that will be made easily accessible to the sea by the opening of the road—a considerable proportion is fertile productive soil; and another and larger portion will equal in fertility the average of the counties in which it is located. It would perhaps be premature to attempt to estimate at this time the pecuniary value of this donation to the stockholders of the Company, but a reasonable approximation will demonstrate plainly and satisfactorily that the road now possesses elements of progress that will command confidence and capital, both at home and abroad, sufficient to ensure its speedy construction. At the moderate average valuation of $5 per acre for lands within six miles of the line we have 439,763 6-10 acres $2,199,818. At $2 50 per acre for average outside of six miles 669,214 6-10 acres $1 673, 036, making a total of $3,872,854, being within a fraction of forty per cent. of the entire cost of the road and equipments, complete and in full operation.

We learn further from the report that the work of gradation of the first 33 miles of the road to *Citronelle,* has been completed, and that the road to that point will be finished by May or June next.

The total receipts and expenditures up to the 10th February, 1852, as per Treasurer's Report, have been as follows:

Total receipts to date of last report		$152,738 51
Instalments on stock	91,298 50	
Balance city tax for 1850	5,825 40	
" " " " 1851	12,973 65	
Bills payable	110,000 00	220,09755
		$372,836 06

The expenditures for the same period have been:

Total to date of last report		$147,651 50
For graduation, masonry, and bridging 33 miles	68,985 13	
Cross ties, joint pieces and laying superstructure	17,587 97	
Rails, spikes, chairs, etc	105,437 72	
Miscellaneous	34,073 90	
Balance	159,89	372,836 06

In addition to the expenditures above stated, about $100,000 will be required for the remainder of track laying; for balances due on engine, cars, etc., and to meet other expenses necessary to place the road in working operation to Citronelle. The construction thus far has been accomplished at a cost considerably within the estimates of the chief engineer, owing principally to the advantageous contracts made for the purchase of iron—while the work done is of the best and most substantial character, equal in every respect to any of the first class railroads in the United States.

At the commencement of this work, the city of Mobile pledged herself to the construction of the first 161 miles, extending to the south line of Kemper county, in Mississippi. To redeem this pledge, it obtained authority from the Legislature of the State, to impose a tax of two per cent upon the real estate of the city for five years. It is believed that this tax will realize to the company at least $1,100,000. The same law authorizes the corporate authorities to anticipate the taxes of the fourth and fifth years, by a loan, secured by the pledge of those taxes, which will thus enable the public to realize the benefits of the road at least two years earlier than could otherwise be anticipated.

The length of the line, and cost of preparing the road bed as far as has been finally located, is by the revised estimates, as follows:

Alabama Division—Citronelle to Mississippi line, 28¼ miles, costing	$299,555
Mississippi line to Kemper line, 97¼ miles, costing	887 426
Total Alabama division, 125½ miles, costing	$1,186,981
Mississippi Division—Kemper line to S. line Pontotoc, 108½ miles, costing	1,049,595
Total Citronelle to Pontotoc county, 234 miles, costing	$2,236,576
By approximate estimates—S. Pontotoc line to Tennessee line, including portion of branch to Tennessee river, 82 miles	$740,000

The amount of reliable subscription thus far obtained, for the prosecution of the work between Citronelle and Pontotoc line, Mississippi, may be estimated as follows:

In Alabama Division—Mobile two per cent tax		$1,100,000
Private subscriptions in Clarke and Lauderdale counties, officially reported, as per original lists on file		37,500
In Mississippi division—county tax subscriptions, Noxubee and Kemper		175,000
Private cash subscriptions officially reported between Kemper and S. line Pontotoc county, inclusive, as per lists on file		511,900
Private subscriptions in Lowndes, Monroe and Chickasaw counties, payable in labor at estimates of chief engineer		265,000
Making		$2,089,400
To which add—Oktibbeha county tax, voted but certificate not yet received	$50,000	
Subscriptions in cash and labor, of which lists in Lauderdale, Kemper, etc., are in hands of agents, informally reported to the board	36,333	
		86 333
Making a total of		$2,175,733

By a comparison of the estimates thus presented it will be seen that there is still wanting, to make the sum required for the local work to Tennessee State line:

Between Kemper S. line and Pontotoc S. line	$60,843
North of Pontotoc S. line to Tennessee line	740,000
Making	$800,813

yet unprovided for in Mississippi for the local work.

It is believed that this amount will be easily raised by proper effort in the counties along the line of the road.

The report also states that no difficulty is anticipated in the construction of the Tennessee division. Its length is 129 miles. To this the State has appropriated the sum of $1,035,000, and the balance will be easily raised by private subscriptions.

The Kentucky division says the report has not yet been completed.

A lively desire is manifested by the citizens of various towns in Kentucky, to connect themselves with this road by branch lines, and one of the most important and valuable of these is a road from Paducah, on the Ohio, at the mouth of Cumberland river, extending south to a favorable point of intersection. Such a line would draw a large traffic from the Wabash valley, and become an important stem of the Mobile and Ohio road. It is understood that the greater portion of its cost has been already provided for, and it should be the policy of this company to encourage the construction of this as well as other auxiliaries to the main trunk, as far as may be in their power. Another connection of value may also be mentioned, terminating on the Mississippi river, at Columbus, Ky. The construction of the two linee here spoken of, will be simultaneous with the progress of the road from Mobile through Tennessee, and will form with it three great termini resting upon different points of the Mississippi and Ohio rivers.

In view of the means now provided, the report recommends that the line from Citronelle to Kemper county line, be put under contract as soon as practicable.

In conclusion the report gives the following summary of the resources which have been provided for this work up to the present time,

Road complete in working order to Citronelle, 33 miles, including equipment —also, cost of all surveys, locating line, etc.. paid for by Mobile subscriptions, say.....	500,000
Mobile two per cent tax.....	1,100,000
Subscriptions in Mississippi private, and county, per previous statement.....	1,075,733
Lands donated by Congress as per estimate.....	3,872,854
Total.....	$6,548,587

The lands included in the estimate, to be made most available to the stockholders, should be withheld from sale until after the completion of the road, when they will have attained a higher value.—They are now however at the disposal of the board, to be offered in security for a loan of five millions to furnish the superstructure and equipment, whenever the amount necessary to complete the local work shall be fully made up. With the spirit now prevailing along the line, it is believed that the deficiency at present existing, can be provided for during the coming spring and summer. Should these expectations be realized, the remainder of the road can be put under contract immediately after. from Pontotoc to the Ohio river, for graduation, etc. The board entertain no apprehensions, that with the securities which they will then be prepared to offer, any difficulty will occur in negotiating the loan desired, upon very favorable terms. This accomplished, they will be enabled to prosecute the work of construction simultaneously at different points of the line, and finally unite the Gulf of Mexico with the Ohio river by railway within the next three or four years.

Pennsylvania.

Pennsylvania Railroad.—An adjourned meeting of the stockholders of the Pennsylvania railroad company was held at Philadelphia on the 5th inst. It was officially stated in the report submitted that the sum of $283,150—which was necessary to secure the conditional subscriptions of the city of Philadelphia and the district of the Northern Liberties—had been promptly made up. The subscribed capital stock of the company is now $9,-876,050. The report says:—

The whole line of the Pennsylvania railroad is now so nearly completed as to be continuous, with the Portage road except for twenty-eight miles on the western division. In July next, these twenty-eight miles will be reduced to eight or ten miles, and this last interval will be closed in the month of September. The levelling of the mountain division is vigorously under way, and its difficulties will soon yield to the intelligent labor by which the process is directed. By the opening of navigation the inclined plane No. 1 will be avoided by the cars, and soon after the planes Nos. 2 and 3 will be dispensed with in traversing the mountain, leaving only a distance of ten miles of the seven remaining impediments of the Alleghany Portage to be overcome. The lessening of this great obstacle in our stupendous labors will be followed by a better regulation of the business of the mountain railroad, and a reduction to *three hours* of the six or seven hitherto consumed in passing it. But for the Allegheny tunnel at Sugar Run Summit, the last ten miles of these planes would soon be abandoned by our cars. The report of the Chief Engineer informs us that the contractor of that division expects to permit the passage of the cars through this difficult portion of his task—the only interruption to a rapid transit over the whole route—in the summer of 1853.

The cost of constructing this railroad, with its mountain obstructions, is unusually low. No one in the country, it is believed, can be compared with it in this respect; and perhaps no railway, on this side of the Atlantic, surpasses it in completeness and finish. That portion of the road which is in use, has paid, during the past year, 6¼ per centum profit on the cost of construction, including equipment and the interest charged to capital. It is a noticable fact, too, reflecting credit on the transportation department, as well as on the capabilities of the route for economy in working, that the expense of running the trains per mile has been as much as 40 per cent less on many of the best regulated railways in New England, and *cheaper than any other railroad in the United States.* It is not a distinction unheard of, perhaps, on any railway, that it commenced and continued to pay legal interest on the cost, out of its receipts, "*two years before a car was able to pass over it!*"

That the friends of the Pennsylvania railroad will subscribe the *two millions and a half* required to complete this great artery of our trade, thus on the verge of completion, the committee do not permit themselves to doubt. If they will not contribute this sum, from the public motive of aiding an enterprise, the most important ever undertaken in Pennsylvania, they will perhaps subscribe to the stock from its excellence, as a mere pecuniary investment. The company is unincumbered with a dollar of debt, and has a first-class railroad which penetrates the richest portion of our own State, and connects, by the cheapest and shortest possible line, the fruitful and almost illimitable west with Philadelphia and the Atlantic States. What more need be said, what further assurance is wanted to prove to capitalists the surpassing value of its stock? On this question doubt or conjecture can have no place. It has the certainty of a *fixed fact.* The receipts already show what the road is capable of accomplishing. In the month of February of last year (1851) the sum received for passengers was $29,-778, and for freight $20,416. During the present month of February, 1852, the receipts for passengers amount to $62,850, and for freight to $69,376; showing as the business of the month an aggregate sum paid into the coffers of the company of $432,-226. The increase, therefore, from the extension of the railroad, is, in regard to passengers, more than *double,* and to freight more than *treble,* the receipts of last year. If such be the results experienced on an unfinished line, what may be expected hereafter!—From the vast trade which is naturally dependent upon, and tributary to this railway, we may confidently anticipate the rich harvest which awaits its completion.

Copper Mining.

While the iron interest in the United States is in a most depressed condition, we are happy to state that in the department of copper mining, we have the most flattering prospect. Our success here is owing to the productiveness of our mines, which must in time enable us to produce copper at a lower rate than any other country. Below we give a condensed statement of the latest intelligence from the Lake Superior region:—

"In the Cliff mine alone, Boston stockholders are interested to the amount of $350,000, at the present market price of the shares, and it is not too much to say that one-quarter, if not one-third of the stocks of the eighteen or twenty other mining companies that are in various stages of development, is held in this city or New England."

The Cliff Mine of course demands the first notice. S. W. Hill, Esq., agent of the Copper Falls Mine, writes:—

"It would have seemed almost foolish to state within the last eighteen months that the Cliff Mine was improving, or that it was likely ever to become richer. But it is certainly much better than ever before. They are now stoping a new mass of copper, commencing about 40 feet to the south of shaft No. 3 in level No. 7, and extending more than 40 feet to the north of it. In the south part of the mine masses are to be seen everywhere, more particularly in the deepest work. I have no doubt this company will send to market, this year, 1,000 to 1,200 tons of copper."

The new mass described is more than eighty feet long and sixteen feet high, and it will yield sixty per cent of pure metal.

A recent article in the Lake Superior Journal, says of the Cliff:—

"They employ at present 220 men, and during the month of October raised fifty masses of copper, weighing in the aggregate thirty tons. They also during the same period stamped vein stone sufficient for fifty-four tons of copper ready for shipping; drafted thirty-seven yards and one foot, and stoped 112 fathoms and 21 feet.

"In connection with this mine the company have a farm comprising 225 acres of improved land, from which have been harvested this season 2,000 bushels of turnips, 600 bushels of oats, and 30 tons of hay, the potato crop being almost an entire failure from the remarkably rainy weather the past season."

Of the "Adventure" mine, A. Coburn, Esq., treasurer of the "Farm," writes:—

"The Adventure mine is producing considerable copper, and Captain Moyle (the superintendent,) says he will send down 30 to 40 tons in the spring."

The same gentleman says:—

"The 'Forrest' mine is looking well; there are probably six tons of copper raised. Some of it is in large masses. The prospects are better than ever I saw them before. The company has a fine saw mill and stamps. Mr. Sales has found a great deal of copper, there being several masses of 600 to 800 pounds."

Of the 'Shirley' mine, the writer says:

"We have reached the vein in the long adit. It is from five to six feet thick, composed of quartz, spar and epidote, charged with very fine copper."

Of other promising locations Mr. Coburn says:

"Mr. Wilson, agent of our mine, (the Farm) is pushing the work on the Farm, Toltec and Algomah with great energy and reduced prices. We shall have supplies sufficient to last till next fall. The vein, in the Farm and Toltec, looks very well."

The same gentleman says:—

"'The Minnesota' is producing from 40 to 50 tons of copper per month."

The Phœnix Mine has been been very successful of late. Joseph Paull, agent of the "North American," writes of the Phœnix:

"The mine is improving. The vein in the first level is from two to two and a half feet wide, very rich stamp work with some barrel copper. In the drift, sixty feet below this, driving south from B winze, the vein is from ten to twelve inches thick; also very rich."

Of the "Copper Falls," the superintendent says:—

"Our mine is now looking much better than ever before. The vein in No. 5 shaft is twenty inches wide, and produces excellent stamp work. In the upper adit the mine is good. Considerable barrel work has been taken from that part of the work to-day. Some sheets of copper are met with there.

"The west vein is yielding some pure copper and mixed rock and copper, equal in richness to the best vein in the country. Our mixed rock and copper is about 9 per cent of the latter.

"In the shaft, the vein is, in the north end, over two feet, and in the south about twenty inches thick. In the adit, we have a good vein, with copper in bunches, and disseminated through the vein rock."

The "Copper Falls," has expended a great deal of money in time past, and without much success. But the new vein is so decided and so rich, that it is now regarded as among the very best of the less developed mines.

The North Western Mine is managed and owned principally in Pittsburg and Detroit. There are fifty men engaged in this mine, which is rich in all its parts, with small mass, bbl. and stamp copper, and is opened in the most advantageous manner for extensive working. The engine is all ready for shipment as soon as navigation opens.

The Phœnix (old Eagle river diggings) is taking out some masses from 800 to 1,200 pounds each—a very promising trade. Here the water power machinery is in full operation.

This mine is nearest the lake shore, and has the nearest access to its harbor of any mine on the lake.

The North American has struck the rock at the depth of 53 feet in sinking the new shaft, on what is called the South Cliff.

The Adventure has continued to improve very

rapidly of late. They have a number of fine masses, and expect to ship 30 tons on the opening of navigation.

The Ridge has been placed under a new manager and mining agent, and is said to be opening very finely. The new agent has the highest opinion of the mine.

This company own 1,298 acres of land, and have mineral rights on 200 more. They employ at present 20 persons, and have all the necessary works for raising and smelting ore. They produce about two tons lead per day, and have capacity for three tons, at a cost of about $30 per ton. On the 16th ult. the workmen commenced drifting between the shafts. A calculation has been made on the basis of the present yield, that there is now over five millions dollars worth of lead between the two shafts.

A correspondent of the National Intelligencer says:—

"The Northwest Mining Company ranks next in value (to the Cliff.) Mining was here commenced in earnest in 1849. About $80,000 have been paid in. In 1849 the net proceeds from the sale of copper amounted to some $5,000; in 1850, to about $32,000; and in 1851 to something over $50,000. This company owns a large tract of mineral territory, upon which two valuable veins have been opened, and a number of others discovered.

"The Minnesota Mining Company is located near the Ontonagon river, some forty miles westward of the two preceding. Immense blocks of pure copper are taken from this mine. It commenced in the autumn of 1848, and has a capital paid in of some $90,000, or $30 on a share—there being but three thousand shares. They command $150 in the market.

"There are a number of other companies working with various success. The prospects of some of them, as, for instance, the Bohemian, Quincy, Douglas Houghton, Adventure, North-Western and Albion, are excellent."

The Bohemian is also according to latest accounts looking exceedingly well. It is in the hands of enterprising men, who have great confidence in the value of the property.

The Norwich also exhibits a very promising appearance. The Superintendent writes that he is getting out large amounts of barrel work of the richest description. He has also got out a mass which weighs 2,000 lbs. He pronounces the mine equal in value to any in that region, and states that the show is so great that blindfold a person well acquainted with the Minnesota, and place him in the shaft of the Norwich, and he would think he was in the Minnesota.

The Windsor, a mine adjourning the Norwich, is also being developed, and promises to be of equal richness with that mine.

Virginia.

Orange and Alexandria Railroad.—A recent number of the Alexandria Gazette states that Mr. Atkinson, the engineer of the road, has returned from a reconnoisance of the country between Lynchburg and Gordonsville, and speaks most favorably of the adaptation of the country for the construction of the proposed extension of the Orange and Alexandria road—a work which we hope to see commenced and prosecuted with vigor, under the auspices of the State—forming the only link wanting to a complete line from Memphis on the Mississippi to this place.

Blue Ridge Railroad.—The bill providing for the more speedy completion of this work has passed both branches of the Virginia Legislature.

The St. Lawrence Line of Atlantic Steamers.

It has already been stated that the Canadian government has advertised for proposals for the establishment of steam communication between Europe and the St. Lawrence. The Montreal Pilot of Tuesday contains the advertisement for tenders for the supply of competent vessels. The steamers to be employed in this service are to be on the screw principle, to ply fortnightly between the ports of Liverpool, Quebec and Montreal, during navigation, and monthly between the ports of Liverpool and Halifax, Portland, or such other Atlantic port as may be agreed on, during the winter months.—*Boston Journal.*

Changes in the Rates of Tolls by the Canal Board.

The canal board has made changes in the rates of tolls on the canals of this State as follows:—

Tolls per 1,000 lbs. per mile is changed	FROM cts.	m.	fr.	TO cts.	m.	fr.
On butter, tallow, beer, cider, and vinegar	0	4	0	0	3	0
On salted pork, bacon, lard and lard oil	0	3	0	0	2	5
On grease	0	4	0	0	2	5
On bloom iron, ("going towards tide water" struck out)	0	3	0	0	2	0
On gas pipes and water pipes.	0	4	0	0	2	0
On pot and pearl ashes and window glass, ("manufactured in this State" struck out,) pig copper	0	4	0	0	2	0
On broken casting, scrap and pig iron	0	3	0	0	2	0
On barilla and bleaching powders, [not enumerated heretofore]				0	4	0
On stoves, ["cast" erased,] iron car wheels, ["and car axles" added,] bed plates for steam engines, plough castings, and all other iron castings, except machines and the parts thereof	0	4	0	0	3	0
On stove pipe and furniture for stoves, not cast iron, ["going from tide water" struck out]	0	8	0	0	6	0
On timber, squared and round if carried in rafts, if cleared "between the 15th of June and 15th of August" changed to "after the 1st of June, and arriving at tide water before the 15th of August," white pine, white wood, bass wood and cedar	0	1	8	0	1	5
On boards, plank, scantling and sawed timber, reduced to inch measure, all kinds of red cedar, cedar posts, all siding, lath or other sawed stuff, less than one inch thick, carried in boats, per 1,000 feet per mile, when not weighed	0	5	0	0	4	0
On ship knees	0	2	0	0	1	0
On shingles carried in boats	0	1	8	0	1	5
On cotton	0	2	0	0	1	0
On rags and junk	0	4	0	0	3	0
On manufactured tobacco going towards tide water	0	4	0	0	1	0
On rye, peas and beans	0	4	0	0	3	0
On flour, starting and going from tide water	0	3	0	0	1	0
On iron in sheets, steel horse shoes, crockery and glassware, and tin in sheets in boxes, going from tide water	0	5	0	0	4	0
On rosin, tar, pitch, turpentine, oil, manufactured tobacco, anchors, chain cables and oakum, going from tide water	0	8	0	0	4	0
On all other merchandise	0	8	0	0	4	0
On railroad iron	0	2	5	0	1	5
On railroad chairs, [not enumerated before]				0	1	5
On all articles not enumerated or excepted, passing from tide water	0	8	0	0	4	0

It will thus be seen that New York is anticipating the movements of rival projects, by adopting a gradual system for the reduction of tolls. The canal will prove a hard customer to contend with. Its enormous revenues fortunately allows the widest range of experiments to ascertain the effect of reduction of tolls. Reductions thus far have always been followed by an increase of revenue.

New Castle and Richmond Railroad.

From the New Castle Courier of the 6th instant, we learn that the extension of the New Castle and Richmond railroad to the city of Lafayette is a fixed fact. Twenty-three miles of the work west of New Castle were let by the board of directors at their meeting on the 2d instant, and notice ordered to be given for proposals for contracts for the balance of the line to Delphi.

The stock is already taken sufficient to do the grading and put down the superstructure, and the iron for the whole line is guaranteed by the Cincinnati, Hamilton and Dayton railroad company, if the company cannot procure it on the sale of their own bonds in time to have it in readiness.—Without doubt the whole of the line from Richmond to Delphi, will be in the hands of contractors by the first of April. The road forms a connection with the Bellefontaine road at Anderson, the Wabash and Erie canal at Logansport, and the Indianapolis and Lafayette road at Lafayette, with the certainty of a connection with the Northern Indiana road to Chicago, and when completed from Logansport to Lafayette, will form an important link in a chain of roads, now in embryo, traversing the Wabash valley, in a direction to Toledo, either via Fort Wayne or Goshen.

The New Castle Courier, from which we gather our intelligence in relation to this great thoro'fare, which promises so much of good to our city, thinks the road can be built with unparalled cheapness, and occupies an outside position that precludes all idea that a rival road can be projected to disturb its business. The Ohio gauge has been adopted for the entire line from the Wabash to Cincinnati, which will avoid all transhipments, and which will tend to draw trade from a great distance on either side; and when completed, it is the opinion of men best qualified to judge in such matters, that it will be the *best paying road* in the State.

Sandusky, Mansfield and Newark Railroad.

The earnings of this road for February, 1852, were $6,120·32 more than during the corresponding month last year. Of this increase, $1,600,70 was in passenger earnings, and the remainder, $4,519,-62, in freight. It is proper to add that except during the last half of the month *this year*, the freighting business of the road was almost suspended in consequence of improvements going on in the warehouse at this point. It will be seen therefore, that the business of the road is opening large.

Last Monday, we are informed, the earnings amounted to over $1,200. That was a pretty fair day's work. The number of passengers carried over the road has largely increased, averaging now about 300 per day.—*Sandusky Register.*

The Wheeling Bridge Case.

The following are the leading facts in this important suit:—

1. The Wheeling bridge is 92 feet high, and has a clear span of 1,010 feet, being erected without piers.

2. The extreme floods in the Ohio, which the court allow to be considered in the cause, rise 30 feet high.

3. Boats with chimneys not exceeding 60 feet in height can pass under the bridge on the highest floods recognized by the court.

4. There are seven steamboats, recently built, which have raised their chimneys to heights varying from 70 to 85 feet, and which claim the right to pass the bridge, in any stage of the water, without lowering their pipes.

5. To accommodate these seven boats, the Supreme Court has decided that this structure, which cost more than two hundred thousand dollars, must be abated.

6. The plans of the bridge were published two

years in advance of its erection, and no complaint or objection was made until the bridge company had expended their entire capital.

CHARLES ELLET, JR.,
Civil Engineer.

American Railroad Journal.

Saturday, March 13, 1852.

Western Railroad Connections.

It is now a settled fact, that by the close of the fall navigation, we shall have a continuous line of railroad from New York to Terre Haute, Indiana. But a few months will elapse, before we shall be in connection with Cincinnati, and with Dayton, which is an important point on the great eastern and western line through Ohio and Indiana. From Indianapolis to the Ohio State line, the Indianapolis and Bellefontaine raod is so far advanced, that we may safely count upon its completion by December next. During the present season, the Dayton and Western and the Greenville and Miami roads will be completed, leaving only a small gap of about ten miles between Greenville and Union, in the Indianapolis and Bellefontain railroad. Arrangements have recently been perfected, we learn, for the completion of this link, simultaneously with the roads named, so that the next winter's travel will be accommodated by a direct line of railroad, extending from the Atlantic cities to the western boundary of Indiana.

Among the companies that compose this great chain, the Indianapolis and Bellefontaine, the Dayton and Western, and the Greenville and Miami, deserve no small degree of praise, for the energetic manner in which they have carried forward their several portions. They have resolutely put their shoulders to the wheel, and will in consequence bring their lines into immediate and profitable use, while others, by failing to imitate their example, are making but feeble headway, with the loss of that *prestige* of success, so important to every new work. The roads enumerated will, from the start, make a show of earnings that will exert a most favorable influence upon the stocks and securities. Those who purchase them at the present time cannot fail to do a good thing.

But for the impolitic course pursued by the State of Illinois, this great western line might in a year more have been opened to St. Louis. The friends of the direct route across that State, will soon have a host of advocates in the crowds of passengers who will exchange at Terre Haute, the rail car for the horse coach, to travel for 165 miles over one of the most villanous roads in the world. No legislature can long withstand the public sentiment thus created.

We hope soon to be able to state that the Wheeling extension of the Cleveland and Pitteburg railroad is under contract, to be completed the present year; a matter of vital importance to the Baltimore and Ohio railroad. We presume there can be no doubt that the Ohio and Pennsylvania railroad will, by the first of January next, form a junction with the Cleveland and Columbus railroad at Crestline.

Another very important link in our western roads is that connecting Toledo with the Ohio roads.—Early in the spring, Toledo and Chicago will be connected by railroad. As soon as the Toledo, Norwalk and Cleveland road shall be completed, Chicago, one of the most important cities in the west, now isolated from the east for many months in the year, will be as accessible as were Albany and Troy a few years since. In 1853, the Rock Island and Chicago will be opened, thus opening to us the mighty Mississippi and all its treasures.

Great Western Railroad of Canada.

The Chief Engineer of this road, R. G. Benedict, Esq., writes to the President of the company, now in England, that rapid progress is being made with the work on that important improvement. A very large force is now actively employed upon various parts of the line, and many of the most difficult sections are in a state of great forwardness.

The company have, we believe, made satisfactory financial arrangements for sufficient means for the whole work, and we presume that the road will be pushed forward and completed with all the dispatch consistent with economy. American capitalists are largely interested in the road, which is regarded as necessary to preserve the business of many of our most important lines. In every point of view, the Great Western is one of the most important projects in this country, and cannot fail to occupy a high place in public estimation, nor to prove a most remunerative investment.

Kentucky.

Henderson and Nashville Railroad.—The people of Henderson, Kentucky, are moving in the construction of the above road. A survey has just been made of that portion of the line extending from Henderson to Hopkinsville, by Mr. Bowley, Chief Engineer of the Evansville and Illinois Railroad; the survey shows a very favorable route. The cost of this first division of the road, of 35 miles, laid with a heavy rail, is estimated at 132,75, or $7,273 per mile, the principal items of cost being the iron and superstructure. The Henderson Banner express great confidence in the carrying out of this project, and states that the necessary amount of stock will at once be subscribed. We have frequently spoken of this proposed road as a very important one. The Evansville and Illinois Railroad will soon be extended north to Terre Haute, where it will connect with the Railroad system of the State. The Henderson and Nashville road is the virtual extension of this great line, *Southward*. And at the latter place it would be brought into connection with the railroads of the South. The road is of easy construction, and is within the ability of the people of that section of Kentucky, and we are glad to see a disposition to turn it to some account in the construction of the above road.

Baltimore and Ohio Railroad.

The earnings of this road for the month of February have been $122,075 40, of which $96,849 63 were from the main stem, and $25,225 77 from the Washington branch.

Stock and Money Market.

The past has been a very active week in Wall street, and nearly every kind of security current there, has shown a large advance. Erie stock reached 85 on Wednesday, but has since slightly declined. Erie first mortgage went to 115, second mortgage to 104½; incomes to 96, new convertibles to 93; old, 92½; with very large transactions in all. Other fancies as well as sound stock have shown a decided advance, as will be seen by our quotations. Hudson River stock has improved to 66, with small sales. Most of this stock is strongly held, and there is but a very small amount in the street. In the coal stocks, there has been a very active business, under the expectation of a very large freight for the coming season. The new western roads are beginning to figure in the street, and we notice sales of the Michigan Southern at 104. The leading western stocks are soon to attract great attention in this market, and many of them will go to a high figure, which will tend to advance all western securities.

The activity of which we have spoken is chiefly confined to the well known stock, and the advance partakes strongly of a speculative character.—Money is very abundant, which allows operators to carry their purchases with a very small margin. The buoyant state of feeling which prevails, has however communicated itself to the securities of works in progress, which are in better demand at higher rates. The foreign demand is good, and rapidly absorbs such securities as come up to its requirements. There is beginning to be great attention paid in Europe to our railroad securities, and they are fast becoming a favorite investment in that quarter, particularly upon the continent.

The prospects of our works in progress, for the present season, are, on the whole, very encouraging. Our railroad companies will find no difficulty in borrowing money, provided they show a sufficient basis for their loans, which should at least equal the amount to be borrowed. We quote the bonds of first class roads in progress at from 85 to 90.—Those of second class projects, or of such are not well known, net the purchases from 75 to 85. The commission in such cases, averaging all the way from 3 to 7 and 8 per cent. It is the misfortune of weak projects, to have a considerable portion of their means wasted in effecting negotiations.

We have often alluded to what we consider to be a great oversight of railroad companies, and that is, the want of suitable effort to make their projects known. Another great mistake which the whole of them commit, is the mystery in which they studiously involve all their negotiations.—Those engaged in the negotiation of securities are in a great measure responsible for this kind of bad management. Why is it that the first class of railroad securities, such for instance as Erie first mortgage are worth from 110 to 115? Simply because money seeks investment at that rate, and the securities are *known* to be good. Now the first mortgage convertible bonds of the first class Ohio roads are better than the first class Erie bonds, from the fact that they pay the same interest, and have an additional value from their convertible clause, which is worth nothing to the Erie. They will in a few years go to the same high figure. Parties who profit by all this advance are the purchasers, and they accomplish this simply by enlightening the public mind, as to the value of the security.—This is a staff which our railroad companies should take into their own hands. Instead of doing this, they are completely at the mercy of the middle man, that stands between them and the purchaser for investment. As soon as a railroad President comes here with his securities, he is at once put into *quarantine*, as if his presence in the street would taint the whole negotiation. He mysteriously disappears, till it is announced that there has been a *safe delivery*, when the mouth pieces of the different parties in New York set up a grand "*feu de joie*," proclaim the grand event, and wind up by stating, "that the negotiations are in the highest degree satisfactory, and advantageous to all the parties concerned." Now if a western merchant should bring to this market for sale 1000 barrels of best quality pork, we do not believe that it would be at all necessary for him to go into retirement, pending negotiations for sale, nor preserve a mys-

terious silence, all the while. No; he would knock out the head of his best barrel, and place at specimen of his merchandise in every body's way. The first effort would be to post every body up with regard to the quality of his pork, and then invite the most extensive competition. This wholesome common sense way of doing things in railroad negotiations are entirely discarded. An impenetrable veil is thrown over the negotiations, which the seller is sworn not to remove, to admit the unhallowed gaze of the public. Now the real object of all this manœuvreing is to blind the eyes of both the seller, and the public who are the final purchasers, to get the securities at the lowest rate, and a the same time to convey the impression that a high rate was paid. Instead of sanctioning such a course, every sale should be *publicly* reported, and the exact price obtained stated. This course would at once reduce matters to a system, and securities would soon sell at their fair value, in the same manner as other kinds of merchandise. Purchasers for investment would investigate for themselves, and the information which is monopolized by a few persons, would, as it were, become common stock of the whole community. Should sales be made at too low a figure, this of itself would attract purchasers, whose competition would carry the price up to a reasonable point, as it does in the ordinary sales of merchandise. Railroad companies, too, make a great mistake in the vast amount of *sham* resorted to in almost every public sale; we mean the fictitious bids put in, and the various tricks practised to sustain the bidding.—The public is aware of all this, and look upon all statements, whether true or fictitious, with pretty much the same eye; that there is the same probability that they were made as a *blind*, as to give light. Unless some system such as we have indicated shall be adopted, companies must expect to submit to part with a large slice from the result of their sales, for services which could in a great measure be dispensed with. The present system is the one best fitted to keep the public mind in the *dark*, as to the value of securities offered. Under it the work of enlightening the public, falls upon the negotiator, who embraces the charge for this service in his commission. We do not say that his charges on this account are not earned, but we do say that by pursuing the obviously proper course, they could in a great measure be dispensed with. A broker is glad to sell Erie stock and bonds, for instance, for ¼ or an ½ commission. Why? Because he has nothing to do but simply see to the transfer; the *public* have fixed the rate. The great object of our railroad friends should be to give their securities the same currency, which *can* be done by posting up the public mind.

At a sale of Western Vermont 7 per cent bonds, $100,000 were disposed of at prices ranging from 85 to 88. The company refused to receive bids under 85. Since the sale, we understand that a large amount has been disposed of at this rate. The security is a good one, but at the present time, western securities are attracting more attention than eastern. A lot of Vermont Valley 7 per ct. bonds were also sold at 85.

It is difficult to give any definite quotation for western securities, based upon works in progress. Prices vary according to circumstances. There is however a good feeling toward them; and in the present state of the market, good securities can be negotiated at what are considered fair prices. Railroads have an encouraging prospect before them for the ensuing year.

The receipts of the New York and New Haven railroad for February are about the same as for the same month of last year. The opening of the Hudson River and Harlem roads to Albany has cut off the Albany business. The figures are:—

For passengers	$40,376 60
For commutation and freight	13,126 84
Total	$53,503 44
Deduct paid Harlem railroad	3,411 67
Total earnings	$50,091 77
Total for February, 1851	50,725 48
Total for February, 1850	30,300 11

The receipts on the Norwich and Worcester road show a fair increase over February of last year:

Receipts Feb. 1852	$17 636 39
" Feb. 1851	16 580 53
Increase in 1852	$2,055 86

Erie Railroad Receipts.—The February receipts of the Erie railroad reach $201,870—a large increase on the previous month. The following is a comparative statement of the business of the road for the first two months of 1851 and 1852:

	1851.	1852.
January	$144,909	$171,441
February	125,105	201,870
Increase for 1852	$109,297	

A quantity of Georgia State bonds, 6's have made their appearance in this market for negotiation.—The State has a high credit, and the bonds we presume will command a good price.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 13, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	105½
U. S. 6's, 1862	112½
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	118
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	120
Indiana 5's	86½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	71
Illinois 6's—interest	43
Kentucky 6's, 1871	107
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	99½
Maine 6's, 1855	103
Maryland 6's	102
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	105½
Ohio 6's, 1860	109½
Ohio 6's, 1870	113
Ohio 6's, 1875	114
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	104½
Tennessee 5's	84
Tennessee 6's, 1880	102
Virginia 6's, 1886	108½

CITY SECURITIES—BONDS.

Brooklyn 6's	105½
Albany 6's, 1871-1881	104½
Cincinnati 6's	95½
St. Louis	93
Louisville 6's 1880	92
Pittsburg 6's, 1869-1871	95½
New York 7's, 1857	106½
New York 5's, 1858 '60	101
New York 5's, 1870-'75	101½
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	103
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	95½
Erie convertible bonds, 7's, 1871	91
Hudson River 1st mort., 7's, 1869	107
Hudson River 2d mort., 7's, 1860	95
New York and New Haven 7's, 1861	102½
Reading 6's, 1870	78½
Reading mortgage, 6's, 1860	83
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	102½
Cleveland and Pittsburg 7's, 1860	94
Ohio and Pennsylvania 7's, 1865	96
Ohio Central 7's, 1861	90

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 3.	Mar. 10.
Albany and Schenectady	99½	100
Boston and Maine	104½	104½
Boston and Lowell	108½	109
Boston and Worcester	100½	101
Boston and Providence	85½	85½
Baltimore and Ohio	62½	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112½	112½
Eastern	96½	97½
Erie	82½	84½
Fall River	98	97½
Fitchburgh	103½	98½
Georgia	—	—
Georgia Central	—	—
Harlem	67½	69
" preferred	108	108
Hartford and New Haven	123	125
Housatonic (preferred)	36	36
Hudson River	65½	65½
Little Miami	—	—
Long Island	21	23
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97½	97½
Michigan Southern	101½	104
New York and New Haven	109	109
New Jersey	126	128
Nashua and Lowell	107	106
New Bedford and Taunton	117	117
Norwich and Worcester	53½	55
Ogdensburgh	27½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	71	71
Rochester and Syracuse	110	113
Stonington	54	54
South Carolina	—	—
Syracuse and Utica	125	125
Taunton Branch	115	117
Utica and Schenectady	127	128
Vermont Central	23½	22½
Vermont and Massachusetts	22½	22
Virginia Central	—	—
Western	103	103½
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Wisconsin, Milwaukee and Mississippi Railroad.

We have been in the habit of looking upon Wisconsin as one of the boundary States of the Union, as embracing the extreme limit of our fertile lands in a northwesterly direction. Nothing in fact can be a greater mistake. A much broader belt of fertile lands lie west of Lake Michigan, in the Mississippi valley, than east of it, extending even to the Atlantic coast. The lake occupies as nearly as possible, a central position in the interior valley of North America. Upon its western shores, therefore, which are the western limit of lake navigation, and the points where merchandise must always be transhipped, must spring up some of the most important towns of the west.

The effect of railroads upon the course of trade, will practically change the direction of the Mississippi. Wherever a railroad strikes the river, it will intercept at that point, all the traffic thrown upon it below the next point of intersection above, so that *commercially*, the river instead of running parallel with the lake, will run at right angles with it, as soon as the various lines of railroad now in progress to connect the two, shall be completed. It is for this reason, that the city of Milwaukee occupies such an important position, and the Milwaukee and Mississippi railroad promises to become such a valuable line of public improvement, as it does. It is the most northern line of railroad yet projected, or that can for years be built, based upon Lake Michigan. Upon striking the Mississippi, it will command the trade of that river above the point of intersection, because it will offer the shortest and cheapest outlet for its business. Now the territory dependent upon that river for an outlet—including the Red River of the North—embraces an area equal to the States of Ohio, Indiana, Illinois and Kentucky. All explorations concur in describing this territory as one of the most fertile and inviting portions of the Union. It is rapidly filling up, and will in a few years more contain a very large population. The Mississippi and St. Peters rivers are navigable almost to their sources; and these interlock with the Red river, one of the most magnificent water courses within our whole territory, being navigable for over 500 miles for the largest class river steamers, for the whole year, excepting the winter season. The vast territory bordering this river, is one of the most inviting fields for emigrants to be found in the United States. It has a soil of inexhaustible fertility, a sufficient supply of wood and timber, and abounds in coal. Its climate is no more objectionable than a greater part of New England. The only element wanting is *time*, to render this one of the most thriving and populous portions of the United States.

Now we see no reason why Milwaukee, and the Milwaukee and Mississippi railroad are not entitled, by virtue of their position, to command a large portion of the trade of the Upper Mississippi, as well as that portion of Iowa which lies opposite to the western terminus of the road. Such being the fact, which we believe to be undisputable, the above road assumes an importance which the public have not awarded to it, simply because its position has not been properly appreciated. It has been forgotten that upon its line is one of the best portions of the country, extending hundreds of miles, for which, for years, the Milwaukee and Mississippi railroad must furnish an outlet, until new and parallel lines shall be constructed, striking the lake still further north; that on the west of the Mississippi river is a vast extent of fertile country, reaching to the base of the Rocky Mountains, through which the above road will be extended, as fast as the country shall become settled. The road that shall strike the lake at the most northerly point possesses many advantages over all others, from the fact that it will have rival lines only on one side. This will be the position of the Milwaukee and Mississippi railroad for years, to say the least.

Milwaukee is, and must always remain, the principal seaport of Wisconsin. It is 90 miles distant from what is regarded its rival, Chicago. The Milwaukee and Mississippi railroad is the only road projected in the State having the same general direction. It will have no rival either for its local or through business. It will, as soon as completed, accommodate a population of over 200,000, with vast commercial and agricultural interests. That portion of Wisconsin dependent upon the road is as densely settled as the average of Indiana or Ohio, and is possessed of equally natural capabilies, and in some respects superior. It will soon become the outlet of the lead of Wisconsin and Iowa, most of which is sent to market by way of New Orleans. As soon as the road strikes the Wisconsin river, a through route to the Mississippi will be formed. It is well known that upon the Wisconsin are the great pineries of the northwest. The lumbering interest on this river is very large. A very large portion of this lumber will find its outlet over the Milwaukee road, by which it will not only be taken to the lake, but distributed over the whole State, the southern portion of which is known to be wanting in this indispensable article.

If a person will take the trouble of examining the capacity of our different railroads for a profitable business, they will hardly find a line superior in any respect to the Milwaukee and Mississippi railroad. Wisconsin has grown so rapidly that we cannot bring ourselves up to a realization of its present condition. But a few years since it was a wilderness. It has now a population probably of 375,000, with a commercial capital of 25,000, possessing all the atributes of a large and thriving city. At the next census, Wisconsin will occupy a prominent rank among our leading States.

Hamilton, Canada West, March 6, 1852.

Editor Railroad Journal.

Sir:—In the ninth number of the Journal of the 28th February, under the head of "*Great Western Railroad of Canada*," is the following statement.

"The Syracuse Star states, that John F. Clark, Esq., late Division Engineer on the Erie canal, has been appointed commissioner on the part of the United States stockholders, as Engineer in Chief of the Great Western railway, and will soon assume the duties of that station."

The foregoing statement is only true in part. I was appointed a commissioner of the company; but, by this appointment, I am in no way connected with the engineer department as an engineer—have no authority, and am in no way responsible in that department.

This explanation is justly due to Roswell G. Benedict, Esq., the present able and popular Chief Engineer of the road—who is the person "under whose supervision the work will be rapidly pushed forward to completion, and the interests of the stockholders carefully guarded."

Please give this correction a place in your Journal, and oblige your obedient servant,

John F. Clark.

Freight on the Pennsylvania Railroad.

There has been much complaint growing out of the fact, that the Pennsylvania railroad company have refused to take packages of freight coming from New York over their road. The alleged reason is this. More freight has been offering than the road could well accommodate, and as all could not be forwarded as fast as received, the company discriminated in favor of merchandise *purchased* in Philadelphia, which amounted to a virtual exclusion of New York freights. The object of all this is to force western people to make their purchases in that city, instead of coming to New York.

This is certainly the most extraordinary policy ever set up by any railroad or canal in this country, and would never have been thought of in any other State but Pennsylvania. We have always regarded railroads as common carriers, who are not only bound in good faith, but legally, to take freight in the order in which it offers. To use railroads for any ulterior purpose, than the legitimate object, which is to facilitate commerce and travel, is a doctrine, which the Pennsylvania road is the *first* to develope, as we believe it will be the *last* to practice. It is too contemptible to gain footing any where else, or to be long sanctioned by the Pennsylvania railroad.

The excessive meaness and ingratitude of this business will be more fully seen, by looking at the facts of the case. The opening of the Ohio and Pennsylvania, and the Cleveland and Pittsburg railroads gives to the Pennsylvania route, for the present winter, some advantage over the New York and Erie. But for these roads, the Pennsylvania line would have hardly had a through passenger or a ton of freight during the suspension of lake navigation. Now both of these roads have been built by New York capital, and when she wishes to use works which are indebted to her for existence, she is shoved aside by a company that owes to New York its present position as a through route. The Ohio and Pennsylvania railroad was projected, and has been carried out expressly as a Philadelphia project. Its object is to build up that city at the expense of New York; yet, notwithstanding this, the former has contributed scarcely a dollar to the work, which never could have had an existence, but for money furnished by New York, although this road is of vast importance to Philadelphia, as has been demonstrated by the course of travel the present winter. So slight is the interest felt towards it by her citizens, that the President of the road stated to us in a recent conversation, that had he been compelled at any time to depend upon Philadelphia for a loan of $200,000, he should have been compelled to give up and abandon the project. Yet the same company comes to this market and is able to raise on favorable terms nearly $3,000,000 to build a road, the avowed object of which is to draw off the business from our own lines of public works, and the city. These facts furnish a good illustration of the difference in the two cities.

We could urge a good many arguments against the policy of the measures adopted by the Pennsylvania railroad, but this would be a mere waste of words, as it is not likely ever to be adopted by any other company, and as the present will be the last season in which it will be available by the former. The New York and Erie and the Baltimore and Ohio connections will be completed during the present year, so that both of these cities will be in communication with the western railroads. The Pennsylvania will on the other hand be compelled

to use the Portage railroad for a year longer, giving another opportunity to her rivals to retaliate, should they choose to imitate the example she has set. But we expect better things from them, as well as from other companies, who will have the wisdom to pursue a high minded and honorable course.

For the American Railroad Journal.

H. V. Poor, Esq:

It is scarcely possible to exaggerate the importance and consequence of the coal trade of the United States; whether considered as a luxury or as productive of mechanical power, it is almost impossible to estimate it.

The statistics of the year exhibit so vast an increase in the consumption of coal as to give great interest to speculations as to the future demand and supply. Very considerable alarm was entertained by the owners of coal stocks and property upon the increase of lines of transit for coal, and consequent over-production of the mineral. It appears that such fears were groundless, and that notwithstanding the increased facilities and the enlarged amount of coal mined, the season closed with an actual deficiency in market. The owners of coal mines may derive much consolation from the calculations made below:—

In 1821, there were		1,071 tons	consumed in	U.S.
In 1831,	"	178,000	"	"
In 1841,	"	888,000	"	"
In 1851,	"	4,383,730	"	"

At the same ratio of increase for the next decade, the consumption will be in 1861 *seventeen millions of tons.* Suppose, however, that the increase is equal to twenty per cent per annum for the same period, which would bring the consumption up to the enormous quantity of *twenty seven millions of tons.* How is this vast supply to be obtained?—Duplicate every coal road, and each canal, and all would not have the capacity to transport so much tonnage. The measure of the capacity of the different lines on which coal forms a part or the whole business, is estimated as follows:—

	Tons.
Delaware and Hudson canal	1,000,000
Lehigh	1,200,000
Schuylkill	800,000
Reading	2,000,000
	5,000,000

To transport these quantities will require large outlays, and it must be remembered that this is an estimate of what *may be* done. Hitherto the quantity has fallen far short of these figures.

The amount of coal annually raised from the mines of England is variously estimated at from 35 to 50 millions of tons; but of this vast product we import, in the *shape of iron and cutlery,* a very considerable amount—an amount which we hope to see lessened by the increased facilities for obtaining a species of coal precisely similar to the Welch, which makes the best of iron. The opening of the Chesapeake and Ohio canal has already cheapened the invaluable fuel of Maryland, and efforts are now being made to reduce it to the consumer still lower, so that a variety of manufactures dependent upon this species of coal may grow up in our own country.

As the belt of wood, from which our railroad companies obtain their supply of fuel, recedes from the coast, our coal mines will receive additional value, for locomotive use. In Great Britain every engine uses coal or coke, and everywhere on the continent, save on the Russian roads, is coal the universal fuel. It behoves the managers of our railways, and the interests of their stockholders demand that they should look into the practical working of the best and cheapest coals for the use of their machinery. The cost of wood is now very high, but added to it the cost of sawing, piling, and interest on buildings—interest on the necessary large amount invested that is required to be kept on hand—the cost is enormous.

There is doubtless a prejudice to be overcome; the operatives accustomed to handling wood do not like to touch coal—but this objection is done away with after trial, as it has been upon the Baltimore roads. There the men will not use wood, as it entails more labor upon them than does coal. It is more work to handle three cords of wood than one ton of coal, and the constant firing rendered necessary with wood is almost done away with.—Independent of considerations like these, we believe that the running expenses of all roads, when the cost of wood is over two dollars per cord, may be materially reduced by the use of coal.

F. B.

Syracuse and Binghamton Railroad.

Editor Railroad Journal.

I desire, through the medium of the American Railroad Journal, to present to the public a few considerations in reference to the Syracuse and Binghamton railroad.

The line of the proposed road is to extend from Syracuse, passing through the beautiful and highly cultivated towns of Onondaga, Lafayette, Tully, Homer, Courtland, and Chenango, to Binghamton on the Erie railroad, a distance of 76 miles. The country traversed is one of the most productive parts of the State, although up to the present time, it has been without the advantages of railroads or canals. The business of this section of country, the above road will accommodate, without the fear of its being diverted by any rival work. The local traffic of the road promises to be very large. And for this, an outlet will be opened in both northerly and southerly directions.

But one of the most important aspects in which the above road can be viewed, is as a *through* route. In connection with the Oswego and Syracuse railroad, it will form a direct line between Oswego and the great coal fields of Pennsylvania, which are soon to supply central and northern New York, and the commerce of the lakes with fuel.

Below I give a table of distances from Oswego south, that will illustrate the advantages of the above route.

Oswego to Syracuse	35 miles.
Syracuse to Binghamton	76 "
Binghamton to Great Bend	15 "
Great Bend to Scranton	48 "
Scranton to the Water Gap	45 "
Water Gap to New York	80 "
To Philadelphia	299 "
Oswego to Water Gap	219 "
Water Gap to Philadelphia	82 "
	301 "

The distance from New York to Rochester is as short by the Syracuse and Binghamton as by the Canandaigua and Corning railroad, viz:

Binghamton to Elmira	58 miles.
Elmira to Jefferson	22 "
Jefferson to Canandaigua	47 "
Canandaigua to Rochester	29 "
	156 "
Binghamton to Syracuse	76 "
Syracuse to Rochester by the new line.	80 "
	156 miles.

I have shown the distance from Oswego to Philadelphia to be 301 miles. The distance between the same points via Albany is 428 miles, showing a saving of 127 by adopting the former route. The distance from Syracuse to New York via Albany is 292 miles; by way of Binghamton and the Erie road the distance is about the same.

It will thus be seen that the Syracuse and Binghamton railroad will form the shortest route from the Great Lakes both to New York and Philadelphia of any yet proposed, or that can be constructed.

I make the following estimate of the business of the road.

150,000 tons of coal to supply the Salt works at Syracuse, and the navigation of the lakes $1½ per ton	$168,750
50 000 tons of other merchandise at $2	100,000
94,000 passengers each year at $1,50 each	141,000
20 way do. at $1,50 "	30,000
Mails and express receipts	10,000
Return freight	100,000
	$549,750

Running expenses, (40 per cent) $219,000 deducted from the above, will leave a balance of $329,850 for net earnings, upon an estimated cost of $1,520,000.

With regard to return freight, I would state that the coal for Syracuse and Oswego is estimated at 150,000 tons, a quantity which must fall far short of the real amount required. The trains that take up this coal, must return empty, unless they take a return through freight, which they can do at very small cost. This freight will be taken to the Erie road at Binghamton, and will thence be transported to New York on the Erie railroad, and subsequently to New York and Philadelphia, according to the demand. As there will be an abundance of freight offering, arrangements will be so made that an equal amount of business will be done in both directions of traffic.

The cost of the road equipped for business is estimated upon good authority not to exceed $20,000 per mile, or an aggregate of $1,520,000. The country is remarkably favorable for railroads, and it is believed that it can be built and equipped for the same sum.

Some facts with regard to the probable demand for coal at Syracuse may be interesting. The city of Syracuse now consumes annually, 300,000 cords of wood, in her Salt works. One half of the expense of salt manufacture will be saved by the introduction of coal, as it will be delivered at about the same cost per ton as wood, and one ton of the former is equal to two of the latter. The salt interest of Syracuse is already suffering severely from the high cost of fuel. It will be placed on a more profitable footing than ever, by the use of coal. The demand alone for the above object must be enormous. In addition to this, the amount required to supply Syracuse, a city of at least 25,000 inhabitants must be large. The city of Oswego, for her lake trade and home consumption, must take an equal amount with Syracuse. So that the transportation of coal alone must give to the road a lucrative business.

The capacity of the flour mills in the vicinity of Oswego are equal to 10,000 bushels of flour per day. These mills in the winter are idle, for the want of a suitable outlet for their flour. This outlet will be furnished by the above road.

In conclusion, I would invite the attention of capitalists to the above project. I believe that as far as its local and through traffic is concerned, no road in the United States can hold out better encouragement. Such must be the opinion of every per-

son who will examine into the matter. I believe it will be as profitable as any portion of the line from Albany to Buffalo, for which our people are paying $130 on a share of $100.

About $600,000 of stock has been already obtained. It is intended to carry this amount up to $800,000 before commencing work. The books of subscription are now openod at the office of the Treasurer, Horace White, Esq., Cashier of the Bank of Syracuse, for the convenience of those who may desire to make further subscriptions to this most important and promising work.

H. BRITNALL.

Syracuse, March 2, 1852.

Railroad Connections between Kentucky and Tennessee.

There are now (says the Maysville Eagle, from which we copy the following,) three prominent projects before the public, proposing to unite Kentucky and Tennessee by railway lines: 1. The Louisville and Nashville; 2, the Danville and Nashville; and 3, the M'Minnville and Burksville line. For the first considerable means have already been provided; the second and third are just now on the anvil and one or both will, we feel confident, be seen hammered into shape. The Louisville and Nashville line has enough local merit to justify its construction; the other two proposed lines, with scarcely less local claims, have perhaps greater merits as national thoroughfares, for they open shorter lines of communications with the north and south and with the east and southwest. On this point, we refer to an article in this paper, giving the railroad distances between the southwest and the principal Atlantic ports, from Norfolk to Boston, over the principal lines of railway constructed or proposed.

A convention is to be held at Nashville on the 12th inst., to promote the connection with Danville. Favorable charters have been granted by the Legislatures of Tennessee and Kentucky; and it needs only to awaken a proper degree of spirit along the line to insure the success of the project. Barren county alone, we are assured, will contribute three or four hundred thousand dollars; and yet Barren is not the strongest county on the line. If other counties make an approach to equal liberality in proportion to means and incentives—as we perceive no reason to doubt—this line may yet be made about as soon as the line from Nashville to Louisville. In a national point of view it is a more important line, for it will give a much shorter and more eligible line of conveyance between the southwest and the Atlantic seaboard, than any other.—With this line, the Maysville roads—the Maysville road running to Lexington and the Maysville road looking to Big Sandy and thence to Atlantic connexions—are intimately connected. It is, in fact, but an extension of our great trunk line—the great central railway of Kentucky. We cannot, therefore, feel otherwise than deeply solicitous for the harmony and success of deliberations at Nashville and the early practical prosecution of the work; and nothing but the most imperious obligations at home would prevent our attendance at the convention.

The M'Minnville and Burksville line is also one of great public importance, and like the Danville and Nashville line, of peculiar importance to the Maysville lines. This line will intersect the Danville and Nashville line, at or below Danville and intersect the Nashville and Chatanooga line, running nearly due north and south across the State of Tennessee, and afford a shorter line from the north to Mobile, Savanna and Charleston, than the line, *via* Nashville. We cannot but feel warmly solicitous also for the success of this project, as well as the other, for both are justifiable, being demanded by considerations of public convenience and economy. A convention of the friends of the M'Minnville line, from Tennessee and Kentucky, is to be held at Burksville, Ky., on the first Monday in April next. We trust its deliberations will prove harmonious and efficient, and result in the adoption of mesures leading to the early consummation of the project.

Ohio.

Cincinnati and Dayton Railroad.—We have received a copy of the report of the survey of this proposed road, between Cincinnati and Dayton, mad by E. Gest, Esq. By the survey it is ascertained that a saving can be effected between the above points, over the Cincinnati, Hamilton and Dayton railroad, of seven and a half miles. It is also stated that the city portion of the road would accommodate the business of the city much better than any road yet built. The cost of the whole line is estimated at about $1,900,000. The construction of the road will involve an expensive tunnel, which alone is estimated to cost $412,000.

The line of the road occupies a very direct line between the two cities connected, while the Cincinnati, Hamilton and Dayton railroad makes a wide circuit for the purpose of accommodating the business of Hamilton, an important point upon the line. But with all these advantages claimed, we doubt the expediency of attempting to construct another road at the present time. If built, it would be a rival of the Cincinnati, Hamilton and Dayton road for the business of the latter. Now we are opposed to the policy of building rival roads until our people are better able to build even the first. There can be no doubt that the Cincinnati, Hamilton and Dayton road can perfectly accommodate the business of both roads. The saving effected by the new line will be small, not half equal to the additional cost. We think our western friends will do better to turn their attention to projects through sections of country where there are no roads, than to waste their means by building parallel lines.

If the above road should be built, a large portion of the money would have to be furnished by New York. Now we do not believe that a loan could be effected here for any purely parallel west'n road. The public would see that it ought not to be built, and capitalists would be very shy in taking it up. The Cincinnati and Dayton road would, too, incur the formidable opposition of the Cincinnati, Hamilton and Dayton, a strong company, with their road already built and in operation.—We think that this company could effectually close the pockets of New York capitalists to any project not favored by them. Such are our views of the matter, taking New York as a stand point, and knowing the feeling entertained here towards western projects.

Georgia.

Superintendent of Central Railroad.—We are gratified to state that the board of directors of this road, have appointed Mr. McPherson B. Millen, Superintendent, in the place of Mr. Wadley, who has taken charge of the State road. For several years Mr. Millen was engaged on the Central road, but latterly has been Assistant Engineer on the Waynesboro' railroad. He is a native of Savannah, and fully competent to fulfil the responsible station to which he has been appointed.

Illinois.

Terre Haute and St. Louis Railroad.—The prospect of a speedy completion of the great lines of railroad from the Atlantic cities to Terre Haute, renders the extension of these lines to St. Louis of the utmost importance. The distance between the two last places is about 165 miles. The route is a most favorable one, and the country traversed not exceeded in fertility by any portion of Illinois.—This road, the people on its line are not able to build, but capitalists interested in the lines east, stand ready to take up the project, and construct the road with the least possible delay. All they want is, that the people of Illinois shall not oppose any obstacles in the way. If they will grant a charter, they will at once secure the expenditure of some $3,500,000 within their State, and open an outlet for one of the best portions of it, which is now deprived of a market for the want of suitable avenues. No other State in the Union would refuse this boon. For an instant, Illinois rejects it, to secure a mere imaginary advantage, a phantom. She has adopted what she calls a *domestic system* of internal improvements, the object of which is to build up large towns within her own borders, and to prevent her trade from going to St. Louis, and other towns beyond her limits. Now, there never was a greater folly than this. Trade seeks to go wherever it can make the best terms. If we tax it, by compelling it to go to points where it is not well accommodated, we are simply imposing a burden upon ourselves, without an equivalent.—Anything paid in this manner is so much lost. If cities will not grow up in Illinois without taxing the people to support them, they had better not exist, as they are not needed, and will only remain a burden upon the productive industry of her people.

But we hope for better things. We expect to see Illinois relax her partial legislation, and throw the door wide open to capitalists, who are disposed to engage in any laudible project. In her natural capacity, she is in many respects, the richest State in the Union. Her great wealth lies dormant, for the want of means with which to develop it. These means are now offered for one of the most important projects ever attempted, and we cannot believe that she will be so blind to her own best interests as to refuse their admittance into the State. In the present age of railroads, it is the great misfortune of Illinois, that her credit, from her former bad legislation and her pecuniary disasters, stands low. There never was a time in which she stood in such need of money with which to prosecute her public works, as at present. She has been gradually out-growing her misfortunes, and gaining in popular estimation, and we should be sorry to see her lose her present vantage ground, as she surely will, should she continue to exclude foreign capital from the State, by bad or injudicious acts of legislation.

New York.

Canandaigua and Niagara Falls Railroad.—A contract has been completed to construct this road from Canandaigua to Niagara Falls, a distance of 96 6-10 miles. The guage is to be 6 feet. The estimated cost of the road, equipped, is $2,500,000, or about $26,000 per mile.

Pennsylvania.

The works of the Schuylkill Navigation company were opened for the transportation of coal on Friday, at 50 cents per ton, and 5 per cent. allowance for wastage. The Delaware and Raritau canal will be opened on Monday next the 15th inst.

EARNINGS AND EXPENSES OF NEW YORK RAILROADS, 1851.

	Miles in use.	Miles run by passenger trains.	Whole number of passengers carried in cars.	Whole number of passengers carried one mile.	Number carried each mile run.	Earnings from passengers.	Expenses of passenger business.	Earned per passenger per mile.	Cost per passenger per mile.	Earned per mile run.	Cost per mile run.	Profit per passenger per mile.	Profit per mile run.	Miles run by freight trains.	Total tons carried.	Total tons carried one mile.	Tons each mile run.
Albany and Schenectady	17	56,753	303,045	5,152,258	90·9	$146,649 91	$58,089 99	2·84	1·11	259	101	1·73	158	44,162	92,058	1,564,986	35·4
Albany and W. Stockbridge	38½	54,824	147,247	4,565,954	83·3	.....	.....	....	....	....	....	....	....	144,637	185,119	6,479,165	44·8
Buffalo and Niagara Falls	22	31,334	150,792	3,028,300	96·6	83,677 44	27,530 72	2·76	0 91	267	88	1·85	179	.....	3,402	74 844	....
Buffalo and Rochester	76	194,319	322,985	18,025,158	92·7	366,245 68	89,431 03	2·03	0·50	188	46	1·53	142	66,820	48,880	3,010,730	45·0
Cayuga and Susquehanna	35	42,160	27,731	728,800	17·3	20,698 41	9 878 41	2·84	1·35	49	23	1·49	26	20,400	13,897	395,162	19·4
Hudson River	144	232,346	749,124	24,721,092	106·4	361,653 75	323,686 44	1·46	1·39	155	135	0·07	20	44,818	12,915	516,600	11·5
Hudson and Berkshire	31½	38,500	45,512	707,889	18·4	19,192 97	13,139 20	2·71	1·85	56	34	0·86	16	21,500	37,145	851,158	39·6
Long Island	95	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	.....	.....	.....	...
New York and Erie	464	725,978	688,789	52,213,092	71·9	1,163,535 77	434,791 26	2·23	0·83	160	60	1·4	100	733,222	250,096	34,790,480	47·4
New York and Harlem	131	216,462	2,673,077	14,595,518	67·4	372,652 10	243,810 20	2·55	1·67	174	108	0·88	66	98,426	47,904	2,399,435	24·4
New York and New Haven	61	320,862	796,936	30,323,236	94·5	595,500 86	not given.	1·96	....	185	...	....	...	90,355	60,525	not given	...
Northern	118	107,919	67,538	3,084,149	28·5	83,560 85	42,937 10	2·71	1·39	78	40	1·32	38	129,736	109,700	8,319,043	63·3
Oswego and Syracuse	35	52,360	80,288	2,042,268	39·0	57,710 51	35,039 77	2·82	1·72	110	67	1·1	43	20,000	19,992	426,748	21·3
Rensselaer and Saratoga	25	.....	178,740	4,697,853	.....	134,288 94	54,658 46	2 86	1·12	...	...	1·74	...	.....	27,194	744 883	...
Rochester and Syracuse	104	356,304	513,241	30,519,808	85 6	690,948 56	238,195 38	2·23	0·78	194	67	1·45	127	121,056	83,569	5,416,084	44·7
Saratoga and Washington	52	.....	134 224	3,850,901	.....	131,093 76	not given.	3·40	....	....	...	....	...	.....	.....	.....	...
Schenectady and Troy	20½	52,755	70,473	1,444,696	27·4	28,652 01	40,678 58	1 98	2·81	54	77	L.	L.	6,075	15,898	325,909	53·6
Syracuse and Utica	53	169,373	449,870	18,392,881	108·6	371,935 86	150,910 69	2·02	0·82	219	89	1·2	130	58,006	86,849	3,734,507	64·4
Troy and Greenbush	6	30,548	135,458	812,748	26·6	19,704 45	23,917 67	2·42	2·94	64	78	L.	L.	5,040	29,449	176,697	35·0
Utica and Schenectady	78	245,440	453,731	27,462,475	111·9	560 523 94	180,083 69	2·04	0·66	228	73	1.38	155	134,268	115,750	5,579,156	41·5
Watertown and Rome	97	52.544	56,907	1,508,964	28·7	37.870 97	14,164 39	2·51	0·94	72	26	1·57	46	19 472	34 307	1,062,166	55 0

EARNINGS AND EXPENSES OF NEW YORK RAILROADS, 1851. (Continued.)

	Freight earnings.	Freight expenses.	Earnings per ton per mile.	Cost per ton per mile.	Earned per mile run.	Cost per mile run.	Profit per ton per mile.	Profit per mile run.	Earnings from sources other than passengers and freight.	Total earnings.	Total transportation expenses.	Amount of dividends.	REMARKS.
Albany and Schenectady	$87,432 64	$46,599 36	5·58	2·98	198	105	2 6	93	5,765 50	$239,847 75	$103,689 35	$70,000 00	
Albany and West Stockbridge	.....	.....	....	....	...	...	....	...	.....	.....	.....	.....	Leased.
Buffalo and Niagara Falls	6,066 10	3,018 40	8·15	4·03	...	...	4·12	...	1,000 00	90,743 54	30,549 12	21,715 21	
Buffalo and Rochester	90,348 50	46,942 49	3 00	1·55	135	68	1·45	67	12,500 00	469,094 18	136,383 52	91,489 16	For ten months.
Cayuga and Susquehanna	30,722 27	24,128 85	7·77	6·16	150	118	1·61	32	24,399 59	75,820 27	34,006 95	.....	
Hudson River	37,095 35	14,594 53	7·18	2·82	83	33	4·36	50	6,800 41	405,549 51	338,280 97	.....	
Hudson and Berkshire	36,054 76	17,164 20	4·23	2·02	168	80	2·21	88	1,000 00	56,247 73	30,303 40	..... :	
Long Island	.....	.....	....	....	....	....	....	....	.....	.....	.....	.....	
New York and Erie	1,108,138 07	586,858 10	3·18	1·68	151	80	1·5	71	.....	2,271,673 84	1,021,649 30	346,856 04	
New York and Harlem	156,806 52	105,777 69	6·53	4·41	159	107	2·12	52	61,483 52	590.942 14	348,587 89	215,542 00	
New York and New Haven	104,664 21	not given.	.....	.....	.....	.....	.....	....	28,342 17	728,507 24	354,276 19	174,930 00	
Northern	200,049 65	120,175 38	2·40	1·44	151	93	0·96	61	7,558 36	291,168 86	163,112 48	.....	
Oswego and Syracuse	13,022 61	10,103 43	3 05	2·36	65	50	0·69	15	22,682 09	93,415 21	45,143 20	12,250 00	
Rensselaer and Saratoga	42,055 63	25,225 69	5·64	3·38	...	...	2·26	...	13,039 00	189,383 57	79,884 15	39,300 00	
Rochester and Syracuse	237,530 47	82,916 09	4·38	1·53	...	...	2·85	...	22,033 38	950,512 41	321,111 47	.....	
Saratoga and Washington	28,697 88	not given.	.....	.....	.....	.....	.....	.....	.....	164,883 99	77,069 10	53,172 00	
Schenectady and Troy	16,263 89	15,589 60	4·99	4·78	268	257	0·21	11	1,331 43	46,247 32	56,268 18	.....	
Syracuse and Utica	111,090 15	61,098 74	2·97	1·63	191	105	1·34	86	15,221 90	498,247 91	212,009 43	239,435 00	
Troy and Greenbush	18,011 75	8,119 59	10·19	4·59	357	161	5·6	196	2,465 48	40,181 68	32,037 26	.....	For eight months.
Utica and Schenectady	251,599 68	101,319 72	4·51	1·81	187	75	2·7	112	45,495 68	857,619 30	281,303 41	412,400 00	
Watertown and Rome	48,132 66	21,397 48	4·53	2·01	247	110	2·52	137	7,865 01	93,868 64	35,561 87	.....	

The Pork Trade.

Hogs Packed this Season.—The following statistics are from the Cincinnati Price Current, of the 19th, showing a very considerable falling off in the number of hogs packed this season. The deficiency has been in the States of Iowa, Illinois, Missouri, southern Kentucky, and Tennessee. This decrease is suitable to the inadequate supply of corn in those States, the crops having been greatly deficient the last two years in Missouri, Illinois and Iowa; and the low price of hogs in 1849, and the subsequent high price of corn, induced farmers to sell the latter instead of feeding hogs; and hence. since 1849 there has been a rapid decline in the hog crop of those States. In Ohio and Indiana the corn crop the last season was ample, and prices being low, it was fed freely to hogs, and the result is that there is in both States an increase in number.

RECAPITULATION.

	1851-'52.	1850-'51
Ohio	461,075	443,418
Indiana	359,761	348 754
Illinois	174,671	257,536
Iowa	27,500	70,500
Missouri	58,168	107,274
Kentucky	199,300	205,914
Green and Cumberland rivers	8,505	24,000
	1,288,975	1,457,396
		1,288,975
Deficiency		168,421
West of White River		2,000
Bedford, is		6,600
Shawneetown and Graysville		5,000
Total deficiency		182,021

Tunnel under the Hudson River.

We recently alluded to the subject of a Tunnel under the Hudson river, at Albany, for railroad purposes. We find in a late number of the Evening Journal the following plan for its construction proposed by Mr. Higham, a well known engineer. He estimates the cost at $517,720, with a double track. If practicable at this expense, the companies interested should not hesitate about undertaking it. It would be preferable to a bridge, and would remove the great bone of contention between Albany and Troy in reference to the construction of one.

The plan is generally as follows:

It is proposed to commence the work at Quackenbush-street, by an open cutting at a descent of 150 feet per mile to Columbia-st., where a sufficient height will be attained for the commencement of the tunnel. The tunnel, from Columbia-st. to the river, is to be made in the usual manner, by driving a drift, and turning brick arches. From the wharf into the basin, the work will be executed by constructing coffer-dams. From this point, for 600 feet under the channel of the river, it is proposed to sink iron tubes, and turn the arches in the tubes. The remainder of the distance to the open cut on the Green Island will be constructed in coffer-dams; across Green Island there will be open cutting. The form proposed for the tunnel is two circles, connected together by a range of columns; the arches to be of brick, twenty-seven inches thick; the brick to be made for the purpose, of the proper shape; three courses of brick to form the depth of the arch. Where the arches join in the centre, on the columns will be cast iron girders.—In the bottom of the arches, under the tracks, will be suitable drains to collect any leakage, and a pump at the lowest point (which will be near the pier) for drawing the water from the tunnel. The object of giving this form to the tunnel was to save height, and to lessen the grades entering into it.

That portion of the tunnel across the channel is to be of the same form as the other parts described; but instead of building coffer-dams, it is proposed to dredge the river to its proper depth, and to sink wrought iron tubes in which the brick arches will be turned. The tubes are proposed to be built of boiler plates, made in such lengths as may be found practicable. The plates of the tube to be riveted on ribs of T iron, to give them form and stiffness. The ends of the several lengths of tubes, as they are sunk, to have temporary bulkheads, so that the arches through each section may be finished when the joining will be made by throwing puddling materials on the outside of the tubes, and when tight, taking out the bulkheads and turning the arches at the connections. The materials for the arches to be taken into the tube by pipes rising above the water. From the iron tubes to the east shore of the river it is proposed to build coffer-dams, in sections of from 200 to 300 feet long, by driving piles and puddling between them. On the island the open cutting to be sufficiently wide to have a plank road laid from the mouth of the tunnel to the highway at East Albany, and a branch, or lateral tunnel, will be made on Broadway, between Maiden-lane and Steuben-st., for carriages and foot passengers. A chimney for ventilation [150 feet high] will be constructed on the pier, at which place will be the permanent draining-pump and the gas works for lighting the tunnel, and the several railroad companies' depots, shops, and grounds. A staircase will also be made on the pier and one on Quay-st., to give access to foot passengers into the tunnel. A double track railroad will be made from East Albany to Quackenbust-st., where they will connect with the tracks of the several roads leading into the general passenger depot proposed to be erected for all the railroads terminating at Albany, and the freight grounds of the Albany and Schenectaday Railroad. In the tunnel will be a sidewalk, neatly railed in, for foot passengers.

The Rabun Gap Railroad.

William Spencer Brown, Chief Engineer of the Greenville and Columbia railroad, has made a rapid reconnoissance of the route of this road from Anderson C. H. to the Rabun Gap, and in his report to Judge O'Neal, President of the Greenville and Columbia railroad company, which is published in the Charleston Mercury, expresses the opinion that the entire road can be built for two million dollars.

The advantages of this route over all others in point of distance, Mr. Brown sets forth in the following table, assuming the length of the road to be 150 miles:

	Miles.
Chattanooga to Charleston, via Atlanta	448
" " " Rabun Gap.	484—36
Knoxville " " Atlanta	548
" " " Rabun Gap.	464—84
Chattanooga to Wilmington via Atlanta	579
" " " Rabun Gap.	528—51
Knoxville " " Atlanta	679
" " " Rabun Gap.	508—171
Chattanooga to Charlotte via Atlanta	563
" " " Rabun Gap.	464—90
Knoxville " " Atlanta	663
" " " Rabun Gap.	444—219

Judge O'Neal accompanies the report with the following letter addressed to "*Many Charlestonians.*"

According to my promise, I furnish the report of Mr. William Spencer Brown, Chief Engineer of the Greenville and Columbia railroad company, of his reconnoissance of the Rabun Gap.

It will be seen, that it is perfectly practicable to construct a railroad from Anderson through it. The connection thence to the Hiwasse, was, I presume, ascertained by Gen. Brisbane, in 1836, to be easy.

Mr. Brown's estimates show that the road can be constructed at a cost certainly not exceeding $2,000,000.

This sum can, I should suppose, be easily raised in South Carolina. The legislature can very well place the balance of their South Carolina railroad stock, some $500,000 or $600,000, in the hands of the company to be organised for this great work. The city of Charleston has, I presume, a similar sum in the Chattanooga and Nashville railroad; it may be also devoted to this work. Something like a million is thus obtained. The merchants of Charleston have so deep an interest in this project, that with their characteristic liberality, they will not fail to subscribe at least $250,000.

Columbia, Newberry, Abbeville, Anderson, Pendleton, and the intervening country between Anderson and Knoxville, with the Greenville and South Carolina railroad company, will make up the balance.

In this, I see I have inadvertantly omitted the South Carolina railroad company. This great company, with its annual income of a million, will surely take an active interest, and manifest it by a subscription of $100,000 or $200,000. For it seems to me the Rabun Gap road will add no ordinary item to her already great revenue.

I hope "Many Charlestonians" will move in this matter in Charleston. What will Charleston do? The Greenville and Columbia railroad company have ordered another reconnoissance and survey, when necessary. Will not Charleston and the South Carolina railroad company unite with the Greenville and Columbia railroad company, place a brigade of engineers on the line, and have a perfect survey?

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.

The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

CAUTION.

India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER, President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents, Warehouse No. 45 Dey street, New York.

Feb. 14.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER, Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.